

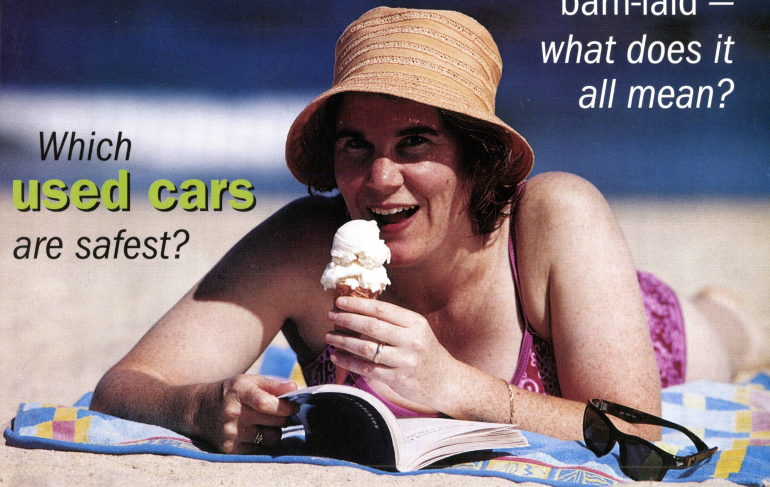
CHOICE

www.choice.com.au

Finding a healthy ice cream (yes, really)

Eggs:
free-range,
barn-laid —
*what does it
all mean?*

*Which
used cars
are safest?*



Democracy vs capital



Louise Sylvan

A huge area of debate at the recent Consumers International (CI) Congress was about the effects of globalisation on people. Clearly, there've been a lot of negative effects, but at the same time, the world's consumer leaders don't want to see the developed countries shutting their borders to products from developing nations. But one big issue is whether global capital should be quite as footloose and fancy-free as our governments have allowed it to become. Since worldwide financial deregulation in the 1980s, this capital — a large part

of which is superannuation funds — wanders around the world seeking the best yield, paying little attention either to the fundamentals of an economy or the ultimate effects on people when the 'herd' moves its money out. Witness the devastating effects on the Asian economies and people in 1997.

Unfettered global capital movements are one of the great pressures on governments to be fiscally 'responsible', in fact forcing many governments to put off or eliminate the types of investment in their people — in health, education, infrastructure — that would enable their citizens to seek higher achievements personally and economically. Our democratically elected governments don't hold themselves accountable only to their citizens, but to the demands of global capital as well.

In crucial ways, that's fundamentally what the Seattle protests were all about, and this tension between democracy and capital is set to grow into a major world battle in the next few years. Consumers International, as the key organisation representing people's interest in the market, will be there — not only to represent consumer views, but also to provide a balancing counterweight to the very powerful and influential voices of the global corporations.

The Congress was held in Durban, South Africa, and was a big success. It was attended by all CI members and many government representatives from around the world. CI is the peak body of consumer organisations worldwide, and ACA was one of its five founding members over 40 years ago. There are now over 250 consumer organisation members from 119 countries. More than 650 delegates contributed to the Congress in discussions ranging from the global rules for dispute resolution in electronic commerce to using consumer rights training as part of the programs for alleviating illiteracy.

Though Africa has fewer consumer organisations per population than other areas of the world, the consumer movement there is the fastest-growing component of the civil society organisations. The reason is that the African economies, like all others, are becoming part of the global economy, and there's recognition by the citizens, as well as governments, that this necessitates consumer protection initiatives.

Oh, and not just by way, since it's an immense honour, I've been elected President of the global consumer movement, which really gives ACA a chance to contribute to the world's developing consumer organisations and to the framing of CI's global campaigns. And CI has appointed Allan Asher, the former Deputy Chairman of the Australian Competition and Consumer Commission, as our new global Campaigns Director. So, it should be interesting times ahead. I'll keep you posted.

Louise Sylvan

CEO, Australian Consumers' Association

Contents

January/February 2001

Cover story

8 The scoop on ice cream

Summer's definitely the season for ice cream... and over-indulgence. But you might not need to feel quite so guilty about those extra scoops — our taste test has some pleasing news.

Cover photo: Kent Mears



Regulars

4 Choice Cuts

New organ donor register; olive oil update; Virgin mobile phone plan; credit for older people; World Consumer Snapshot.

7 Your Letters

When is a lay-by not a lay-by; noisy vacuum cleaner; more on chocolate.

14 Drivelines: Used car safety

In the market for a used car? You probably want a safe one, so check out this survey.



Your letters

We welcome the letters you send us — please always include a daytime telephone number so we can contact you quickly if we want to follow up your letter. We're sorry we can't personally answer every letter we receive, but we do use them in our research. Thanks for taking the time to keep in touch.

Write to us at CHOICE, 57 Carrington Road, Marrickville 2204.
Phone us on (02) 9577 3399. Fax us on (02) 9577 3355.

Email us at ausconsumer@choice.com.au.

Web address: www.choice.com.au.



27 Your Money: What are managed funds?

Australians invest almost \$13 billion in managed funds annually. That's a lotta loot. So how do they work? Find out here.

30 Consumer Bookshelf

48 Recalls and bans

51 Choice index

March 2000 – January/February 2001

52 The Hard Word

Crazy claims, over-the-top ads — the ridiculous, the outrageous or the plain misleading.

Reports

22 The egg case: cracked wide open

From boiling an egg without an explosion to telling how old it is — get egg savvy in less time than it takes to soft-boil one. And just how chook-friendly are the production methods?

40 Freedom from information?

A review of freedom of information laws said: "More must be done to dismantle the culture of secrecy that still pervades some aspects of Australian public-sector administration." So how well are the laws working?

CHOICE Online

Don't forget: if you have a current personal subscription to CHOICE, you can also have free access to our website: www.choice.com.au. Just call Consumer Services on (02) 9577 3399 and have your email address ready.



Compact cameras: APS or 35 mm? Check it out on page 33. ▶



Tests

17 Cordless phones: Away from base

A good result: one of the cheapest models in this test was also one of the best. And do you really have to buy a digital model for security?

33 Shopping for a compact camera

Mystified by camera talk and in the dark about APS? Look here for a quick route to point and shoot.

41 HiFi VCRs:

The good news: most of the models tested are pretty good. The bad news? Digital TV could cause VCR problems for some people. Find out if you'll be affected.



REQUEST A TEST

If you've seen something you'd like us to test, email us at requestatest@choice.com.au or call us on (02) 9577 3399.



Virgin Mobile: livening up the marketplace?

First there was Richard Branson's Virgin music label, and more recently the company's venture into cheap airfares. Now Virgin has further diversified into mobile phone provision, with Virgin Mobile. Since it wasn't around when we evaluated mobile phone plans in the August 2000 issue, here's a rundown of its pros and cons. (Incidentally, it took us two weeks of phone calls and finally a trip to the store just to get hold of a brochure.)

Existing mobile users can buy a 'starter kit' for \$39 that includes a SIM card and \$39 worth of calls to use within 30 days (peak or off-peak). If you're a mobile phone virgin (sorry), you can purchase a 'Go Go pack' for between \$99 and \$199 that includes a phone. (If you need help choosing a handset, CHOICE will be publishing a test of them in an upcoming issue.) There's a 'minimum expenditure' (essentially, a monthly access fee) of \$15 per month.

Calls may be either pre- or post-paid, with the option of switching between methods of payment. Pre-paying customers top up recharge cards; post-paying customers undergo a credit check and are then billed each month. All handsets purchased have a one-year warranty; insurance (such as limited cover against call costs accrued if the phone is stolen) is only available if you join as a post-paying customer.

The same rate is charged for all calls within Australia, which makes local calls expensive and STD relatively cheap. Rates certainly aren't the cheapest available, ranging from 25 cents a minute off-peak if you spend at least \$200 a month, to \$1 a minute peak on \$20 a month. Your usage pattern will determine whether they're attractive or not.

GOOD POINTS

- Virgin Mobile can be used anywhere Optus Mobile Digital Network transmits (96% of Australia).
- You don't have a contract with the company, except to pay for calls made. And if you buy a phone you need to pay for it within 12 months.
- Calls are billed in one-second increments with a flagfall of 15 cents, which

means you're only paying for the time you use, on top of the base call rate of 15 cents.

- Extra features such as text-messaging and voicemail incur relatively low charges.
- Call rates are automatically calculated at the cheapest available rate, so if your usage increases past a certain price level, you'll be charged less per call.

BAD POINTS

- There are no discounts for calling other people connected to the Virgin Mobile network.
- 'Globetrotting', which connects travellers to overseas networks, is available only to post-paying customers.
- The network may not meet the requirements of business users because there's currently no facility for Internet services, email notification or receiving faxes.

If you want to know more about mobile phone plans, refer to *Mobile phones: don't get caught in a trap*, in CHOICE, August 2000, or go to CHOICE Online for the web version at www.choice.com.au.

Update

Travel insurance

CHOICE, November 2000

Backpackers beware! If you're staying in youth hostels you need to be extra careful with your luggage. If other people have a key to the room you're staying in (for example in a bunk room), insurers may consider it to be a 'public place'. This means you wouldn't be covered if your baggage was stolen. **ZURICH** won't even sell you a policy if you're planning to stay in youth hostels for more than 50% of the time you're travelling.



Update

New national organ donor register

Australia's first national register of organ donors, the Australian Organ Donor Register (AODR), is up and

running, and should make it easier to become an organ donor — especially if you don't have a driver's licence. Currently only 46% of Australians have chosen to be organ donors, though 90% have said they support the idea.

If you register with the AODR your information can be accessed by authorised personnel anywhere in Australia. Up to now this has been a problem in some states because the states' driver's licence databases or registers aren't automatically linked.

You don't need to join the AODR if you've already ticked your driver's licence or you're on a state register — it'll operate alongside state databases. It may link up with them if there are no privacy issues, but this is still being negotiated.

You can register by:

- Filling out a form at a local Medicare office.

- Going to the AODR website (www.hic.gov.au/organ/index.htm), printing out its form and sending it in. (Soon you'll be able to register online.)

You can choose which organs you want to donate and you can change your decision at any time.

According to the Health Insurance Commission (HIC), which runs the AODR, parents can register children under the age of 13 by either nominating the child themselves or cosigning with the child. There's currently no place on the form where parents can cosign to confirm their child's registration, but HIC has assured CHOICE that it will change its forms early this year to make the requirement for a parent's or guardian's signature clearer. Until then, parents are advised to sign their name next to their child's (if they're under 13 and nominating themselves) in the space where the form asks for a signature.

Most importantly, if you do put your name on an organ donor register or tick your licence, remember to discuss your decision with family members to ensure they understand and accept your wishes.

For more information about the AODR and organ donation, see the August 2000 issue of CHOICE or visit our website: www.choice.com.au. You can also visit the AODR website (see left), call them on 1800 777 203, or visit your local Medicare office.

Update

The good oil
(CHOICE, November 2000)

Good news on Viva olive oil

In CHOICE's expert taste test of extra-virgin olive oils, the only Australian-made oil sold in supermarkets that was included, **VIVA Australian Extra Virgin Olive Oil (Early Harvest)**, was rated lowest. Its manufacturer told us this was inconsistent with the oil's good results in other independent taste tests and invited us to attend another one as an observer to see for ourselves. Given this evidence, we went along.

The test included most of the other brands of oil sold in supermarkets that were in our test, and this time the **VIVA** oil did well. It was rated second overall (and best of all the supermarket oils tested) by the panel of six trained tasters, who gave it scores of 13 to 17.5 out of 20 and made comments such as "grassy, tasty", "good nose, not a lot of fruit on the palate", "very good, balanced" and "very good oil and fresh".

So what happened in our taste test? As noted in the article, there was no date marking of any kind on half of the products we bought, including the **VIVA**. We bought what was on the shop shelves, just as any

consumer would have to do. We now think that in the **VIVA** oil's case, we must have bought old stock and/or stock that had been stored and handled poorly. Either of these reasons would account for the poor scores and comments our expert panel gave it.

It's good news for consumers that **VIVA** is in fact a good product when it's in the condition it should be. But it's bad news for both consumers and the olive oil industry that the lack of any date marking on the bottles means you could end up buying an extra-virgin olive oil that's way past its best. We're repeating our call for either a 'harvest' or a 'packed on' date for olive oil, and we'll check out olive oil again when manufacturers have had a chance to respond, to see if the situation's improved.



WORLD CONSUMER SNAPSHOT

■ Bad Tigger!

When we were kids, 'poo' was considered a rude word, and we relished the chance to use it legitimately when discussing Winnie the Pooh.

But now it's Pooh's friend, Tigger, who's causing consternation among the straitlaced. Thousands of talking toy Tiggers have been recalled in the UK after consumers complained that the toy growls the word 'wanker'. Disney, the toy's manufacturer, denies the claim, insisting Tigger actually says, "I'm Tigger", followed by his distinctive growl. We can't comment, since we haven't heard one, but if we manage to track some down, we can think of a few deserving gift recipients.

■ Don't sweat on the phone!

Austria's *Konsument* magazine warns you not to answer your mobile phone when playing tennis — or engaging in other sweaty activities. One of its readers did, and the sweat dripping from his ear into the phone caused irreparable damage to his Nokia 7110. The phone was less

than six months old and still under warranty. However, Nokia said it was impossible to repair and, in any case, water damage wasn't covered. *Konsument* says it knows of several similar cases involving other brands of mobiles.

■ Rats prefer organic

Does organic food taste better? In our taste test (see CHOICE, September 2000) we couldn't provide a definitive answer. Germany's *Test* magazine came to the same conclusion when it tested 33 samples of potatoes, carrots, tomatoes and lettuce.

However, a similar test in Austria using rats instead of humans as the panel of taste testers found that rats preferred organic vegies to conventionally farmed ones. The rats even noticed when the feed troughs were swapped. And this isn't the first time it's happened — a German study in 1995 arrived at the same conclusion: animals prefer organic food. Given that rats are the first passengers to jump ship when disaster looms, do they know something we don't?

Corrections

Travel insurance

CHOICE, November 2000

On page 17 we said **AFTA**, **FAI**, **HARVEY WORLD**, **JETSET**, **READY PLAN** and **STA** don't pay for breakage of your glasses. **HIH INSURANCE**, their underwriter, has since informed us that these policies do provide cover for this. Non-coverage is still true for **MBF** and **COMPREHENSIVE**.

www.books

CHOICE, November 2000

In the profile on page 31, **QBD THE BOOKSHOP** is listed as selling new and used books. In fact it only sells new books. The profile also said you can only pay online by credit card. In fact **QBD** also has fax ordering, but you don't discover you can choose this option till you get right through to the stage of buying a book.

No credit for older consumers

Your options are very limited if you're an 'asset-rich' but 'cash-poor' retiree or aged pensioner who needs to borrow money to cover expenses like home maintenance. According to the National Information Centre on Retirement Investments (NICRI), currently no commercial lenders offer loans to older people using their home equity as security.

St George Bank confirms that it's stopped offering its 'Money for Living' loan that worked like a mortgage over the borrower's home. Instead of repaying the interest, it compounded over time and was eventually paid out of your estate. And Sellstay, another operator that used to offer home equity conversion loans to older people, is no longer operating.

While loans like these have their disadvantages (you could live so long the money runs out, or compound interest could overtake the property's value, leaving nothing for your estate), their disappearance means older people have even fewer options if they need to borrow money.

If you need a lump sum, your options are now limited to one of the following:

- Use the Commonwealth Government's Pensions Loan Scheme (PLS — see right for more on this).
- Ask for an advance on your Commonwealth pension (see right).

- Use your credit card, but beware high interest rates if you can't pay it off within the interest-free period.
 - If you still have a mortgage with a redraw facility or line of credit, you may be able to negotiate with your lender to continue to use the credit/redraw facility when you've paid off your loan. Check ongoing fees and conditions with your lender.
 - There are loan schemes for seniors in Victoria and SA (see below right for details) but they're for specific purposes.
 - Sell your home. Move to a cheaper property or rent and use the capital you get from the sale of your house to invest and generate income.
 - Borrow from family members. Ask your children to lend you the money, bearing in mind they'll be paid back out of your estate.
 - Ask family members to buy your home and allow you to continue living there rent-free.
- Even if you make an arrangement with family members, get legal advice from your own lawyer — not the same lawyer as them — to ensure your interests are protected. Most community legal centres can provide legal guidance — you'll find your local centre's contact details in the phone book. It's also important for all parties to get tax advice.

The Pensions Loan Scheme

The Pensions Loan Scheme provides income support in the form of a loan, for a short time or for an indefinite period, secured against your home or other real estate you own in Australia.

Loan applications and payments are organised through Centrelink or the Department of Veterans' Affairs, depending on what type of pension you receive. It's paid in regular fortnightly payments in addition to your pension, and you can use it for anything you like. To qualify for it you must:

- Be a man aged 65 or over, or a woman at the current pension age or over, or the partner of either.
- Be receiving or could receive a part pension under the income or the assets test (or your partner must be in this position). If you or your partner already receive the full pension, you don't qualify.
- Have real estate in Australia (including your principal home) to offer as security for the loan.

The maximum amount you can borrow is the difference between your current or potential part pension and the maximum pension. Compound interest (currently 5.25%) is charged, calculated on a fortnightly basis.

You can repay the money in full or in part at any time. It can also be repaid from your estate after your death — you don't have to make any repayments of interest or capital during your lifetime while you still own the property, though the loan would usually be repaid if the property's sold.

A pension advance?

The Commonwealth Government offers pensioners a pension advance of between \$250 and \$500. Only one advance is available in any 12-month period.

It's repaid by deductions from pension payments over the following six months. It can be used for any purpose, but you must show you're able to repay the money without financial hardship.

Specific loans

- The Victorian Department of Human Services offers older people with disabilities (or their carers) Home Renovation Loans for health and safety modifications. For more information call 1800 134 872.
- In SA HomeStart, in conjunction with the Office of the Commissioner for the Ageing, offers the Seniors Loan to help you stay at home in safety and comfort. Call (08) 8210 0500 or 1800 018 788.



When a lay-by isn't a lay-by

Mid last year I had a bunk bed put on lay-by at a major furniture store. When I rang the store's warehouse to arrange pick-up (about three months later, after I'd finished paying it off), I was told the store no longer had these bunks in stock.

I told the woman on the phone that there had to be one for me, because I'd had one on lay-by for a few months. She said she was sorry, but the bunk beds had been discontinued and they had no more. When I asked how it was possible that I'd spent all this time paying off a bunk bed that they hadn't even put aside for me, I was told they couldn't possibly put things aside for people, because they had so many stores and only one warehouse.

After ringing one of their stores, the woman found out there was actually one left on the floor. She offered it to me, assuming me (even though she hadn't seen it) it was in good condition. She offered me free delivery, but told me there was no return on the goods.

I rang Consumer Affairs who told us the retailer had no right to say we couldn't return faulty goods, and it should offer up to 20% discount off floor stock.

When I rang the store back and told them this — and after much arguing (the woman wouldn't let me speak to the manager) — they finally offered me \$20 off, as my husband had actually gone to see the bunk and it had a few chunks missing out of the wood. I had no choice other than to accept this, as my daughter really wanted that bunk bed in particular.

I'd like to know what lay-by really means. As far as I know, you're supposed to be paying off something that a shop has put aside for you. I want to let other readers know, so they can avoid this happening to them.

Kerry O'Donnell
Airport West, Victoria

A good point. Ms O'Donnell's experience shows that it's worthwhile checking with the trader when you put something on lay-by that it's actually being put aside. If it's not, you should check regularly that stock hasn't sold out.

The Victorian Fair Trading Act 1999, which regulates lay sales there, doesn't stipulate that traders must keep aside items put on lay-by, but if they can't supply the goods when they're paid off, you're entitled to a refund. You could also claim reasonable damages, such as the difference between the price of the goods then and now. Floor-stock goods should always be offered at a discounted price.

When you next make a lay-by purchase, make sure the trader gives you a statement clearly outlining the terms and conditions of the transaction and including a description of the goods purchased, stipulating when payments are due and whether or not a cancellation charge is payable. In NSW, Victoria and the ACT this is required by law.

For more information on how to complain successfully and where to go, check out the Your Rights section on our website: www.choice.com.au

Noisy vacuum cleaner

Your last article on vacuum cleaners (CHOICE, July 2000) arrived just three days after I'd purchased a new Daewoo machine to replace my 15-year-old Hitachi, which had finally succumbed to the rigours of housework. I noted that the Daewoo model in your tests came a poor last, but had made my choice, so I figured that was my bad luck.

On one subject, though — decibels — I'd point out that buyers should insist the cleaner be fully assembled and turned on while in the store so the true noise level can be experienced. The cleaner I bought was demonstrated without the hose or wands attached, and the noise seemed acceptable. Once home,

however, the machine proved to be so loud that I couldn't hear the phone ringing right next to me.

Then the suction failed after only a few weeks and when the authorised repairer couldn't fix it, I returned it, complete with an unemptied dustbag, to the retailer, who exchanged it happily. I now own a Volta Rolfi, one of your recommended models.

D K Chillingworth
Broadbeach Waters,
Queensland

Chocolate and diet

I've always found CHOICE to offer up-to-date, factual advice on matters, but I disagree with one of the comments made about chocolate in the article entitled *Food of the gods* in the May 2000 issue. The article stated: "The cocoa butter in chocolate does contain saturated fat, which can increase blood cholesterol and contribute to heart disease."

While it's true that cocoa butter contains saturated fat, the type of fat is primarily stearic acid, which has been shown in recent studies to have a little or no effect on blood cholesterol. This is true of all

premium and well-known brands of chocolate, but some of the cheaper varieties may substitute lower-quality ingredients for cocoa butter and therefore be rich in other types of saturated fats liable to raise blood cholesterol levels.

Allan Fong, BPharm, MPS
Via Internet

Mr Fong is correct. The main type of fatty acid from cocoa butter is stearic acid, which has a neutral effect on blood cholesterol levels. It's palmitic acid (another saturated fat) that's the big culprit in raising blood cholesterol levels.

However, in compound chocolate some cocoa butter substitutes contribute fatty acids that can increase blood cholesterol levels. And chocolate is calorie-dense (it has a lot of fat), and can contribute to weight gain and in turn put extra pressure on the heart.

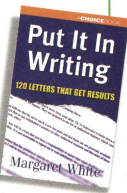
But don't despair if you love chocolate and want to lower your cholesterol levels. Research has shown that a small amount of chocolate can in fact increase your chance of complying with a low-fat diet.

Letter of the month

We want to hear from you — your experiences help our research and often let other readers know about scams and rip-offs. To thank you for writing to us, *Your Letters* awards a prize of a CHOICE book to the 'Letter of the month'. This month's winner, Kerry O'Donnell of Airport West, Victoria, receives *Put it in writing: 120 letters that get results* (plus our booklet *Your shopping rights*), or any other book of her choice from Consumer Bookshelf, pages 30 to 32.

We're sorry we don't have the resources to answer all your letters personally, and in the magazine we may edit them or print only an extract. See page 2 for how to reach us.

And keep your letters and emails coming about positive outcomes following your complaint to a retailer, manufacturer or tradesperson (see last month's CHOICE). Address your letters to 'Thumbs up' at the address published on page 2.



the scoop on ice cream



Summer's definitely the season for ice cream. It's also often the season of over-indulgence. But you might not need to be so concerned about that extra scoop or two — our taste test has some pleasing news.

IN BRIEF

- Find out how much fat, sugar and calories are in that scoop (see the nutrition table, page 12), and what your choices are and what *What's what*, right).
- Our tasters of low- and reduced-fat ice cream had some pleasant surprises. See *It tastes like...*, page 13.
- See *How to store ice cream* (page 10) for tips on avoiding that gritty disaster.

THE ICE CREAM SECTION OF THE supermarket freezer looks a bit like a candy-bar display these days. And most of them don't even show the fat or sugar content on their labels, making it very difficult when you're trying to choose.

How do 'novelty' ice creams compare with regular? And what are the healthier options? Read on for what's what and how the different brands shape up in the fat and calorie stakes.

What's what?

The following profiles cover all the different groups of frozen ice cream-like desserts. To compare the calories, fat and sugar of the different brands, see the table on page 12.

Ice cream

To be described as 'ice cream' a product must be made from milk, cream or milk products (skim milk, whey, buttermilk). The fat content must be from milk fat only. Ice cream can roughly be divided into the following groups, depending on its fat content: premium (and super-premium), regular, reduced- and low-fat. We've also included a 'novelty' category.

■ Premium

'Premium' or 'super-premium' on a label can mean different things because it isn't defined by food regulations. It's really a marketing tool, and usually refers to a dense ice cream with more fat and less air than regular ice cream, and one that's been

Premium ice cream: examples include Norco Cape Byron, Streets Blue Ribbon Extras, Sara Lee Classic, Connoisseur Classic Vanilla.

'Regular' ice cream: examples include Pauls Vanilla, Oak Classic Vanilla, Streets Blue Ribbon Vanilla



made with 'natural' or higher-quality ingredients (for example, fresh cream and egg yolks).

Those described as 'super-premium' or 'supreme' are usually even denser (higher in fat, with less air) than 'premium' ones.

The fat and calorie content of these ice creams can vary a lot; for individual brand information see the table on page 12.

■ Regular ice cream

Regular ice cream must have at least 10% milk fat by weight but can have more or less air whipped into it to create different textures. Sugars, flavours, colours and other additives may also be used (see *What else is in the tub?*, page 10, for more).

See the table on page 12 to find out how regular ice cream compares to other types (premium, reduced- and low-fat brands) for fat, sugar and calories, as well as other ice cream-like desserts.

■ Novelty ice cream

These have essentially the same basic ingredients as regular ice cream, plus lollies or well-known chocolate bar ingredients. Surprisingly, most of them don't have much more fat or calories than regular ice cream. But some, like CADBURY Picnic, Cherry Ripe and Crunchie do, so watch out. In two scoops you get nearly double the fat and sugar and about 60% more calories than in the regular stuff. See the table for how other 'novelty' types fare.

■ Reduced-fat ice cream

These ice creams have similar ingredients to regular ice cream but less fat — no more than 6.5% by weight. They may also contain artificial sweeteners.

■ Low-fat ice cream

These ice creams have similar ingredients to regular ice cream but no more than 4% fat by weight.

Dairy-based ice confection

This contains milk solids (skim milk or powder) but not milk fat. Some brands use saturated vegetable

fats (palm or coconut oil) and others contain polyunsaturated vegetable oil (usually with a 'polyunsaturated' claim on the label). The amount of fat varies. It can be more than in regular ice cream (for example, STREETS Vianetta Vanilla) or as little as reduced- or low-fat ice cream (for example, DAIRY BELL French Vanilla and DAIRY BELL Lite, respectively).

Sometimes dairy-based ice confections are called 'frozen confection', but you won't see this name used very often these days.

Fruit-based ice confection

This is made from fruit juices with no milk solids. It has vegetable gums added to give the smooth ice cream-like texture.

Gelato

Water and sugar are the main ingredients of gelato. Other ingredients include fruit juice and sometimes fruit. Most contain little or no fat, and not surprisingly aren't very high in calories.

Frozen yoghurt

This is similar to ice cream except it's based on milk that's had a bacterial culture added to it to ferment it (to make it into yoghurt). As with ice cream, there are reduced- and low-fat versions as well.

Soy-based ice confection

There's no specific standard for this, but basically the milk solids are replaced with soy protein. The milk fat is usually replaced with saturated vegetable fat (coconut or palm oil). The amount of fat can vary from brand to brand, and while some are quite low in fat they can be high in sugar.

FOOD STANDARD REVIEW — ICE CREAM SAVED!

Plans by our food regulator to ditch the compositional standard for ice cream along with a range of other compositional standards for 'icon' foods (such as jam, yoghurt and chocolate) were rejected by health ministers when they met to consider the new joint Australia and New Zealand Food Standards Code in late November. This is good news for consumers.

Other information wins for consumers include a mandatory nutrition information panel on food labels, as well as the introduction of percentage labelling of key ingredients, enabling effective comparison across brands.

Low-fat ice cream: examples include Nestlé Peters Light & Creamy, Norco Prestige Light, Bulla Light, Weight Watchers Sweet Celebrations.

Reduced-fat ice cream: examples include Cadbury Light Vanilla, Streets Blue Ribbon Light Vanilla, Home Brand Lite Vanilla, Dairy Bell Reduced Fat Vanilla.

'Novelty' ice cream: examples include Nestlé Peters Milo, Nestlé Peters Smarties, Cadbury Cherry Ripe, Cadbury Crunchie, Nestlé Peters Rolo, Cadbury Picnic.



What else is in the tub?

Home-made ice cream is mainly cream, sugar and eggs. You simply beat in air, by hand or using an electric ice cream maker (see the results of our ice cream maker test in CHOICE, December 2000), and freeze. Of these ingredients, you'll always find sugar and air in store-bought ice cream, as well as flavourings and other additives.

Skimmed milk (non-fat milk solids)

This is the main ingredient in most ice cream, giving it protein, vitamins and minerals. The protein and sugar in skimmed milk help keep fat evenly distributed and bind water and air into the ice cream.

Sugars

The main sugar in ice cream is sucrose (table sugar). Most of them also contain glucose syrup, adding to the total sugar level. Also included in the total is lactose from skimmed milk. It's difficult to make low-sugar ice cream because sugar can't just be replaced by artificial sweeteners; something has to take up the space it usually fills.

Butter fat/cream

This increases the richness of flavour, produces a smooth texture and gives body to the ice cream.

Air

It's not on the ingredients list, but without it you'd just have a block of ice. Different amounts of air create different textures. You don't really know how much air you're paying for because ice cream is sold by volume, not weight.

Dairy-based ice confection: examples include Streets Vennetta, Dairy Bell Lite, Dairy Bell Snow Boy.

Emulsifiers

These help give the ice cream a smooth texture by stopping globules of fat and water separating. Commonly used ones are mono- and di-glycerides (additive 471) and polysorbate 80 (433).

Stabilisers

They keep the texture smooth by slowing or reducing the growth of ice crystals during storage. Common ones include carrageenan (407; seaweed extract), vegetable gums like locust bean (410) and guar gum (412), as well as sodium carboxymethyl cellulose (466). Gelatine (extracted mainly from beef waste) is used as well, although it's not in many of the brands on test here. We've highlighted the brands that contain gelatine in our table — vegetarians might want to avoid them. Unfortunately, this isn't the whole story for vegetarians. Emulsifier 471 (see above) can be from animal or vegetable sources — and even the manufacturer might not know which.

Colourings

The yellow colour of vanilla ice cream usually comes from the colouring annatto (160b). Often the artificial colours tartrazine (102) and sunset yellow (110) are used as well.

Flavourings

Manufacturers don't have to tell you the names of the flavourings they use; nor are they required to state whether a flavouring is artificial or natural. Natural

vanilla extract is expensive, so the cheaper vanilla ice creams usually have artificial flavours in them.

How to store ice cream

Ever wondered why your ice cream sometimes gets that icy or sandy texture? It's the large ice crystals that form when ice cream undergoes fluctuation in storage temperature. When its temperature rises, even only a little, some of the tiny ice crystals melt; when the temperature drops again the remaining ice crystals grow larger. This is known as heat shock, and the result is a gritty sensation on the tongue.

So what can you do about it?

- Take an Esky to the supermarket with you for your ice cream to travel home in the car (as well as other frozen or refrigerated foods).
- Make sure you grab the ice cream last, and try and get a tub that's further down in the freezer if it's a chest freezer, or towards the back in a stand-up freezer.
- Make sure it's not stored above the load line in a chest freezer. (No food should be stored above this line. If you notice any food sitting above it, tell the dairy section manager.)
- Don't choose a product with ice crystals around the container. It's a sign that it's undergone temperature changes and so might have a gritty texture.
- Put the ice cream in the freezer as soon as you get home, and after using it don't leave it sitting around on the kitchen bench melting; put it straight back in the freezer.
- Ice cream lasts longer at lower temperatures. At -18°C it'll be hard and keep its texture and appearance better than at higher temperatures.

Fruit-based ice confection: examples include Vitari, Weis Frutia.

Gelato: examples include Alba Gelati Fragolina, Gelati Italia Lemon Sorbet.



Ice cream — and a healthy diet?

Watching your weight — what's your best bet?

If you're eating ice cream as a treat, you could make it worthwhile and choose a brand and flavour you specially like. The occasional high-calorie and high-fat food won't do most of us any harm.

But...if you're an ice cream addict and you want to watch your weight, you'll need to choose alternatives with significantly less fat and calories than regular or premium ice cream. That means at least choosing a reduced-fat ice cream. A low-fat one would be better still, though perhaps too much of a taste sacrifice for some. See the results of our low- and reduced-fat ice cream taste test for which ones might be worth a try.

Alternatively, you might want to forgo the whole ice cream experience and try something different, like gelato — it's got virtually no fat and not many calories. Or a reduced-fat frozen yoghurt might be the one for you.

Either way, there are plenty of options — those at the top of the table (page 12) are the ones to focus on.

For people with diabetes

If you've got diabetes, stick to your dietitian's advice. Ice cream isn't necessarily a no-no for people with diabetes, but you do need to watch your fat intake because maintaining a healthy weight is important. So it's advisable to go for low- or reduced-fat ice cream instead of regular or premium. This not only means less total fat, but less saturated fat, which is important for diabetics because they're three times more likely to suffer heart disease than those without diabetes (and saturated fat is a risk factor for heart disease).

Most ice creams have a low to moderate GI (glycaemic index — this measures a food's ability to raise blood glucose levels), which is OK for people with diabetes.

Fruit ice confections are a different story. They generally have a high glucose level and a high GI and so aren't ideal. However, if someone with diabetes has eaten three serves of low-GI foods in the day, a serve of something like this as well won't be too bad.

Watching your cholesterol level?

If you've got a heart condition, you'll be watching your blood cholesterol. The most important dietary aspect is to keep down your intake of saturated and trans fat (which acts like saturated fat in the body). These raise blood cholesterol levels.

The fat in ice cream (animal fat) is mainly saturated, so it's best to avoid regular or premium

ice cream if you're worried about heart disease. A little low- or reduced-fat ice cream might be OK.

Although ice confection contains vegetable fat instead of milk fat, it's often coconut or palm oil, and the fat in these two oils, like in dairy fats, is mainly saturated.

Lactose-intolerant?

If you've got a problem with milk sugar, soy-based alternatives have a similar texture to ice cream. However, one of the two brands we looked at (**SANITARIUM So Good**) was high in other sugars and calories. Of course, you could always go for a gelato, fruit ice confection or frozen yoghurt (lactose-intolerant people can generally eat fermented dairy products).

Does 'lite' equal less fat?

Often 'light' or 'lite' is easier to spot on an ice cream label than low- or reduced-fat. But is it lower in fat? Usually, yes.

Although 'light' can mean anything from light in colour, flavour or texture to light in fat, on ice cream it almost always means it's low- or reduced- fat. But low-fat means less fat than reduced-fat (see page 9), so you still need to check the nutrition panel to find out just how 'light' the product is.

Unfortunately there are exceptions to this generalisation. Take **SARA LEE Light**, for example. It's got 4.5 g of fat in a serve, nearly as much as regular ice cream, but it's not breaking any rules in calling itself a reduced-fat ice cream. It doesn't have more than 6.5 g of fat in 100 g (or 6.5% by weight), and that's the regulation for reduced-fat ice cream.

What does that work out to be in your diet? A 'serve' of ice cream is 100 mL, which, because of all the air whipped into it, normally only weighs about 50 g. So a reduced-fat ice cream with 6.5% fat by weight would normally have about 3 g of fat per 100 mL serve.

However, **SARA LEE Light** is so dense (there's not much air in it) that two scoops weigh more than the usual 50 g, so it ends up with more fat and calories than its reduced-fat friends.

Not all 'light' is equal. This ice cream is light compared to its high-fat premium version, but not compared to other 'light' ice creams.



JANESSA MARSHALL



Frozen yoghurt:
examples include
Bulla Fruit 'n Yogurt,
Norco Frozen
Yogurt, Ski D'Lite
Frozen Yogurt.



Soy-based ice confection:
examples include So
Natural Ice Dream,
Sanitarium So Good.



JANESSA MARSHALL

WHAT'S IN YOUR SCOOP? — NUTRITIONAL COMPARISON OF BRANDS (from lowest to highest energy content (calories))

Brand / name	Flavour	Category	Sugar (g / 2 scoops)	Fat (g / 2 scoops)	Energy (kJ / cal per 2 scoops)
ALBA Gelati Fragolina	Strawberry	Gelato	9.0 (C)	0 (C)	205 / 49 (C)
DAIRY BELL Lite	Vanilla	Ice confection	6.5	2.0	230 / 55
GELATI ITALIA Lemon Sorbet	Lemon	Gelato	12.0 (C)	1.0 (C)	240 / 57 (C)
VITARI	Strawberry	Fruit ice confection	10.5	<1.0	240 / 57
BULLA Light Vanilla Ice Cream	Vanilla	Low-fat ice cream	10.5	0.5	250 / 60
COLES Light Vanilla	Vanilla	Low-fat ice cream	10.0	1.5	260 / 62
FARMLAND Light Vanilla	Vanilla	Low-fat ice cream	10.0	1.5	260 / 62
FRUCCIO	Vanilla	Ice confection	4.5	2.5	260 / 62
NORCO Countrystyle Light Vanilla Ice Cream Slices	Vanilla	Low-fat ice cream	7.5	1.5	260 / 62
NORCO Prestige Light	Peaches and cream	Low-fat ice cream	10.0	1.0	260 / 62
FIRST CHOICE Classic Vanilla Lite	Vanilla	Low-fat ice cream	10.5	1.5	270 / 65
WEIGHT WATCHERS Sweet Celebrations	Vanilla	Low-fat ice cream	10.0	<0.5	280 / 67
BULLA Fruit 'n Yogurt	Strawberry	Frozen yogurt	10.5 (C)	2.5 (C)	290 / 70 (C)
CADBURY Light Vanilla	Vanilla	Reduced-fat ice cream	11.0	2.0	300 / 72
NESTLÉ PETERS Light & Creamy	Vanilla	Low-fat ice cream	9.5	1.5	300 / 72
NORCO Frozen Yogurt	Strawberry	Frozen yogurt	11.5 (C)	2.0 (C)	310 / 74 (C)
WEIS Frutia	Mango	Fruit ice confection	12.5	1.0	310 / 74
DAIRY BELL Reduced Fat Vanilla Ice Cream	Vanilla	Reduced-fat ice cream	8.5	3.0	320 / 76
SKI D'Lite Frozen Yogurt (A)	Wild strawberry	Frozen yogurt	10.0 (C)	2.5 (C)	320 / 76 (C)
ALPINE Light Indulgence	Vanilla	Reduced-fat ice cream	10.5 (C)	3.0 (C)	350 / 84 (C)
STREETS Blue Ribbon Light Vanilla (A)	Vanilla	Reduced-fat ice cream	9.0 (C)	3.0 (C)	350 / 84 (C)
HOME BRAND Lite Vanilla Ice Cream (A)	Vanilla	Reduced-fat ice cream	11.0	3.0	370 / 88
FARMLAND Vanilla	Vanilla	Ice confection	11.5	5.0	380 / 91
DAIRY BELL French Vanilla Frozen Confection	Vanilla	Ice confection	9.0 (C)	4.5 (C)	390 / 93 (C)
STREETS Paddle Pop in a Tub 'Rainbow'	'Rainbow'	Reduced-fat ice cream	10.0	3.5	390 / 93
NESTLÉ PETERS Carbohydrate Modified Ice Cream	Vanilla	Modified ice cream	3.5	5.5	400 / 96
DAIRY BELL SNOW BOY Ice Confection	Vanilla	Ice confection	11.0 (C)	5.0 (C)	410 / 98 (C)
SO NATURAL Ice Dream Vanilla Supreme	Vanilla	Soy ice confection	10.0	2.0	420 / 100
CADBURY Creamy Vanilla	Vanilla	Premium ice cream	9.5	6.0	440 / 105
CADBURY Top Deck	Vanilla and milk chocolate	Novelty ice cream	9.0	6.0	440 / 105
Vanilla ice cream (average) (B)	Vanilla	'Regular' ice cream	9.5	5.5	440 / 105
NESTLÉ PETERS Violet Crumble (A)	Violet Crumble	Novelty ice cream	14.5	5.5	450 / 108
NESTLÉ PETERS Rolo (A)	Chocolate and caramel	Novelty ice cream	12.0	5.5	460 / 110
CADBURY Caramello	Caramello	Novelty ice cream	10.5	6.0	470 / 112
NESTLÉ PETERS Smarties (A)	Ice cream with confectionery	Novelty ice cream	12.5	5.5	470 / 112
NORCO CAPE BYRON Supreme Exquisite Vanilla	Vanilla	Premium ice cream	11.0 (C)	6.5 (C)	470 / 112 (C)
STREETS Blue Ribbon Extras (A)	Hazelnut chocolate	Premium ice cream	7.0	6.5	480 / 115
NESTLÉ PETERS Milo (A)	Milo	Novelty ice cream	11.5	7.5	510 / 122
SARA LEE Light (A)	Vanilla	Reduced-fat ice cream	10.0	4.5	510 / 122
STREETS Blue Ribbon Extras (A)	Toffee crunch	Premium ice cream	10.0	7.0	510 / 122
CADBURY Jelly Choc Chip	Vanilla with choc chips and raspberry jelly	Novelty ice cream	16.5	5.5	530 / 127
SANITARIUM So Good Creamy Vanilla	Vanilla	Soy-based ice cream alternative	14.0	6.5	540 / 129
MÖVENPICK Swiss Premium Ice Cream	Vanilla	Premium ice cream	12.0	8.5	560 / 134
STREETS Vienetta	Vanilla	Ice confection	10.0	9.0	600 / 143

WHAT'S IN YOUR SCOOP?, *continued*

Brand / name (from lowest to highest energy (calories))	Flavour	Category	Sugar (g / 2 scoops)	Fat (g / 2 scoops)	Energy (kJ / cal per 2 scoops)
CADBURY Dairy Milk Chip	Vanilla with choc chips	Novelty ice cream	11.0	7.5	610 / 146
FIRST CHOICE Indulgence	Sticky caramel	Premium ice cream	14.5	8.5	620 / 148
STREETS Blue Ribbon Extras (A)	Chocolate fudge	Premium ice cream	10.0	8.5	650 / 155
CADBURY Cherry Ripe	Cherry Ripe	Novelty ice cream	17.0	9.0	700 / 167
NORCO Prestige Chequers (A)	Strawberries and cream	Premium ice cream	17.5 (C)	8.0 (C)	700 / 167 (C)
CADBURY Picnic	Peanut/choc	Novelty ice cream	18.0	10.0	730 / 174
CADBURY Crunchie	Crunchie with honeycomb and chocolate	Novelty ice cream	18.5	10.0	740 / 176
CADBURY Mad About Chocolate	Chocolate	Premium ice cream	16.5	11.0	790 / 189
SARA LEE Classic Ice Cream	Vanilla	Premium ice cream	10.0	13.0	930 / 222
CONNOISSEUR Classic Vanilla	Vanilla	Premium ice cream	19.0	14.0	940 / 225

2 scoops = 100 mL

Figures for sugar and fat are rounded to 0.5 and kilojoules are rounded to the nearest 10.

(A) These products contain gelatine.

Our buyers collected all widely available brands of ice cream including regular, premium, reduced- and low-fat, ice confection and any other type of treat they could find in that section of the freezer. Some might not be available nationally.

When vanilla was on offer, that's the flavour they bought. If you buy other flavours, the energy, fat and sugar content may vary slightly — check the nutrition panel if it has one.

Because all regular ice creams are pretty similar in nutritional composition we haven't listed individual brands. Instead we've included average figures based on widely available brands.

It tastes like...

We didn't find it hard to get 30 volunteers to taste ice cream. Maybe they wouldn't have been quite so enthusiastic if they'd known it was low- and reduced-fat ice cream — 14 widely available brands in all. We chose vanilla flavour for all but two brands that weren't available in vanilla (see the table, right).

The panellists scored the flavour and texture, as well as giving an overall rating — see the table.

STREETS BLUE RIBBON Light came top of the pack with a score of 70%; 77% of tasters said they'd buy it. It was described as having a strong vanilla flavour with a creamy texture. **CADBURY** Light, **SARA LEE** Light and **STREETS Paddle Pop** also did quite well. However, **SARA LEE** Light has nearly as much fat and calories as regular ice cream (it's only reduced-fat compared to its rather high-fat premium version).

NORCO Prestige Light (Peaches and Cream) was the top-rating low-fat ice cream. All in all, the reduced-fat alternatives were certainly more popular than the low-fat ones.

(B) Based on widely available brands of regular ice cream.

(C) Nutritional information was given 'per 100 g', not 'per 100 mL' like the other brands, so these figures are an approximation based on 50 g ice cream per 100 mL serve.

ICE CREAM TASTE TEST

Brand	Type	Overall score (%)	
STREETS BLUE RIBBON Light Vanilla	Reduced-fat	70	equal
CADBURY Light Vanilla	Reduced-fat	60	
SARA LEE Light	Reduced-fat	60	
STREETS Paddle Pop (Rainbow)	Reduced-fat	60	
DAIRY BELL Reduced-fat Vanilla Ice Cream	Reduced-fat	55	equal
HOME BRAND Lite Vanilla Ice Cream	Reduced-fat	50	
NORCO Prestige Light (Peaches & cream)	Low-fat	50	
COLES Light Vanilla	Low-fat	45	
FIRST CHOICE Classic Vanilla Lite	Low-fat	45	equal
NESTLÉ PETERS Light & Creamy	Low-fat	45	
NORCO COUNTRYSTYLE Light Vanilla Ice Cream Slices	Low-fat	45	
WEIGHT WATCHERS Sweet Celebrations	Low-fat	45	
BULLA Light Vanilla Ice Cream	Low-fat	40	equal
FARMLAND Light Vanilla	Low-fat	40	

1 Overall score

Tasters were asked to rate ice creams on a one to five scale, where one equals 'poor' and five equals 'excellent'. These scores were averaged and expressed as the percentage shown in the table, rounded to the nearest 5%.



VANESSA MARSHALL



In the market for a used car? Then you probably want a safe one.

IN BRIEF

■ The used car safety ratings show the level of protection cars have provided in real-life two-car accidents for their driver and the driver of the other vehicle.

A CAR CRASH CAN BE TRAGIC FOR anyone — used car safety ratings help you find a model that gives better protection if you're in an accident.

The main findings

- Large, expensive models usually have better safety equipment — for example, a few years ago airbags weren't commonly found in smaller cars.
 - Heavy cars often fare better due to simple physics: if a heavy car collides with a light one, the light one is generally worse off.
 - The safety of a particular model often improves over time due to better crash design and improved safety equipment.
- Of course, there are always exceptions, and some smaller, older models (such as the Peugeot 505, 1982–93) may perform better than larger, more recent ones (for example, the Holden Commodore VT, 1997–98).

What to look for

If you're in the market for a used car, some of these findings may not be very helpful. You probably have a budget (so the safe European luxury car won't be an option) and certain needs (for example, most of your driving may be done in the city, so a large 4WD wouldn't make much sense).

These ratings can only be part of your research into finding the best model. Once you've decided on the best *type* of car for your needs, use the ratings plus the following information to decide on the best model:

- **Reliability** — from the CHOICE reliability survey (see CHOICE, September, 1999).
- **Repair costs** — for example, from the NRMA Insurance low-speed crash tests regularly published in CHOICE (last in Jan/Feb 2000).
- **Safety** — from the ANCAP high-speed lab crash tests; like these used car accident ratings, they're regularly published in CHOICE (last in Jan/Feb 2000).
- **Fuel efficiency** — for example, from the *Fuel Efficiency Guide* published by the Australian Greenhouse Office. See its website on www.greenhouse.gov.au/transport/fuelguide/foreword.html.



1 CRASHWORTHINESS

This rating shows how well the car prevents serious injury to the driver in an accident, compared to the average of all the rated cars:

- ✓✓ Significantly (at least 20%) better protection than average.
- ✓ Better protection than average.
- o Average protection.
- × Worse protection than average.
- ×× Significantly (at least 20%) worse protection than average.

Make and model; year of manufacture

(in order of crashworthiness,
alphabetical when equal)

SMALL CARS

Crashworthiness	1	2
Aggressivity		
DAIHATSU Applause, 1989-98	o	o
FIAT Regatta, 1984-89	o	na
FORD Laser, 1991-94	o	✓
FORD Laser, 1995-98	o	na
HOLDEN Gemini RB, 1986-87	o	na
HONDA Civic, 1982-83	o	na
HONDA Civic, 1992-95	o	o
HONDA Civic, 1996-98	o	na
HONDA Concerto, 1988-93	o	na
HYUNDAI Lantia, 1991-95	o	na
HYUNDAI Lantia, 1996-98	o	na
MAZDA 121, 1994-96	o	na
MAZDA 323, 1990-93	o	na
DAIHATSU Cordia, 1982-89	o	×
DAIHATSU Lancer CA / CB, 1988-92	o	✓
NISSAN Pulsar/Vector, 1992-95	o	o
NISSAN Pulsar/Vector, 1996-98	o	na
ROVER Quintet, 1982-86	o	na
TOYOTA Corolla, 1982-84	o	✓
TOYOTA Corolla / HOLDEN Nova, 1994-98	o	o
TOYOTA Tercel, 1983-88	o	na
FORD Laser, 1982-88 / MAZDA 323, 1982-88	×	✓
NISSAN Pulsar/Vector, 1988-90	×	o
HOLDEN Astra, 1988-90 / HOLDEN Gemini, 1982-84	×	✓
HONDA Civic, 1984-87	×	o
HONDA Civic, 1988-91	×	o
HYUNDAI Excel, 1990-94	×	o
HYUNDAI S Coupe, 1990-96	×	na
MAZDA 323, 1995-98	×	na
MITSUBISHI Lancer CC, 1993-95	×	o
MITSUBISHI Lancer CE/Mirage, 1995-98	×	o
SUBARU Impreza, 1993-98	×	na

2 AGGRESSIVITY

This shows the risk of injury to the driver of the other car in a two-car accident (compared to the average of all the rated cars). Ideally, a car should protect not only its own occupants, but also those of other cars in an accident.

- ✓ Significantly better protection than average.
- o Average protection.
- ×

Note: The data for similar models (for example, Holden Commodore and Toyota Lexcen) has been combined to give better statistical precision.

TOYOTA Corolla, 1986-88	×	✓
TOYOTA Corolla / HOLDEN Nova, 1990-93	×	o
DAEWOO S Cielo, 1995-97	×	na
DAIHATSU Charade, 1982-86	×	na
DAIHATSU Charade, 1988-92	×	✓
DAIHATSU Charade, 1993-98	×	✓
DAIHATSU Handivan, 1982-90	×	na
DAIHATSU Mira, 1992-95	×	na
FORD Festiva WDW/H, 1994-98	×	o
HOLDEN Astra, 1982-86 / NISSAN Pulsar/Vector, 1982-86	×	✓
HOLDEN Barina, 1985-88 / SUZUKI Swift, 1985-88	×	o
HOLDEN Barina, 1989-93 / SUZUKI Swift, 1989-98	×	✓
HOLDEN Barina SB, 1995-98	×	o
HONDA City, 1983-86	×	na
HYUNDAI Excel, 1982-89	×	na
HYUNDAI Excel, 1995-98	×	o
MAZDA 121, 1987-93	×	o
MITSUBISHI Colt, 1982-88	×	✓
SUBARU Sherpa/Fiori, 1989-92	×	na
SUZUKI Hatch, 1982-85	×	na

MEDIUM CARS

FORD Telstar, 1983-86 / MAZDA 626/MX6, 1983-86	✓	✓
FORD Telstar, 1988-91 / MAZDA 626/MX6, 1988-91	✓	o
PEUGEOT 505, 1982-93	✓	na
SUBARU Liberty, 1989-94	✓	o
FORD Mondeo, 1995-98	o	na
FORD Telstar, 1992-97 / MAZDA 626/MX6, 1992-97	o	o
HOLDEN Apollo JK/L, 1988-92, / TOYOTA Camry, 1988-92	o	o
MITSUBISHI Galant, 1989-94	o	na
MITSUBISHI Nimbus, 1984-91	o	na
MITSUBISHI Sigma/Scorpion, 1982-86	o	✓
NISSAN Bluebird, 1982-86	o	✓
NISSAN Bluebird, 1993-98	o	na
NISSAN Gazelle, 1984-88	o	na
NISSAN Pintara, 1986-88	o	o

NISSAN Pintara, 1989-92 / FORD Corsair, 1989-92	o	o
NISSAN Prairie, 1984-86	o	na
NISSAN Stanza, 1982-83	o	na
SUBARU Liberty, 1995-98	o	na
TOYOTA Camry, 1983-86	o	o
TOYOTA Corona, 1982-87	o	✓
HOLDEN Camira, 1982-89	×	✓
SUBARU 1800 / Leone, 1982-95	×	✓

LARGE CARS

FORD Falcon EA, 1988-Mar 92 / FORD Falcon EB Series I	✓	✓	o
FORD Falcon EB Series II, Apr 1992-94 / FORD Falcon ED	✓	o	o
FORD Falcon EF/EL, 1994-98	✓	×	o
FORD Falcon XE/XF, 1982-88	✓	o	o
HOLDEN Apollo JM / JP, 1993-97 / TOYOTA Camry, 1993-97	✓	o	o
HOLDEN Commodore VN/VP, 1989-93 / TOYOTA Lexcen, 1989-93	✓	o	o
HOLDEN Commodore VR/VS, 1993-97 / TOYOTA Lexcen, 1993-97	✓	×	o
MITSUBISHI Magna TE/TF/TH, 1996-98 / MITSUBISHI Verada KE/KF/KH, 1996-98	✓	o	o
MITSUBISHI Magna TR/TS, 1991-96 / MITSUBISHI Verada KR/KS, 1991-96	✓	o	o
HOLDEN Commodore VB-VL, 1982-88	o	o	o
HOLDEN Commodore VT, 1997-98	o	×	o
HYUNDAI Sonata, 1989-97	o	o	o
MITSUBISHI Magna TM/TN/TP, 1985-90	o	o	o
NISSAN Skyline, 1982-90	o	×	o

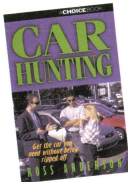
PASSENGER VANS

MITSUBISHI Starwagon, 1987-94	o	×
MITSUBISHI Starwagon, 1995-98	o	na
TOYOTA Tarago, 1991-98	o	na
TOYOTA Tarago, 1983-89	×	o
MITSUBISHI Starwagon/L300, 1982-86	×	o

na No rating possible — insufficient data.

Continued overleaf

The CHOICE book *Car Hunting* by Ross Anderson explains all the tricks and traps of the car trade, and offers tips on how to get the best deal.



Make and model;
year of manufacture (continued)
(in order of crashworthiness,
alphabetical when equal)

LUXURY CARS

	1 Crashworthiness	2 Aggressivity
VOLVO 700/900 Series, 1984-92	✓	o
BMW 3 Series, 1982-91	✓	o
BMW 5 Series, 1982-88	✓	na
FORD Fairlane N & LTD D, 1988-94	✓	o
HONDA Accord, 1986-90	✓	na
TOYOTA Cressida, 1989-93	✓	o
VOLVO 200 Series, 1982-93	✓	o
BMW 3 Series, 1992-98	o	o
BMW 5 Series, 1989-95	o	na
FORD Fairlane N & LTD D, 1995-98	o	na
FORD Fairlane Z & LTD F, 1982-88	o	o
HOLDEN Statesman/Caprice, 1990-93	o	na
HOLDEN Statesman/Caprice, 1994-98	o	na
HONDA Accord, 1982-85	o	o
HONDA Accord, 1994-98	o	na
HONDA Legend, 1986-95	o	na
MAZDA 929, 1982-90	o	o
MERCEDES BENZ C-Class W201, 1987-94	o	na
MERCEDES BENZ E-Class W124, 1986-93	o	na
NISSAN Maxima, 1990-94	o	na
SAAB 900 Series, 1982-93	o	na
TOYOTA Crown/Cressida, 1982-85	o	o
TOYOTA Crown/Cressida, 1986-88	o	na

SPORTS CARS

ALFA ROMEO 33, 1983-92	o	na
FORD Capri, 1989-94	o	na
HONDA Integra, 1986-88	o	na
HONDA Integra, 1990-92	o	na
HONDA Prelude, 1983-91	o	na
HONDA Prelude, 1992-96	o	na
MAZDA MX5, 1989-98	o	na
MAZDA RX7, 1982-85	o	na
NISSAN 300ZX, 1986-97	o	na
RENAULT Fuego, 1982-87	o	na
TOYOTA Celica, 1982-85	o	o
TOYOTA Celica, 1986-89	o	×
TOYOTA Celica, 1990-93	o	o
TOYOTA Supra, 1982-90	o	na
NISSAN Exa, 1983-86	×	na
TOYOTA Paseo, 1991-98	×	na
NISSAN NX/NX-R, 1991-96	×	na

FOUR-WHEEL DRIVES

NISSAN Patrol, 1988-97 /	✓	✓	×
FORD Maverick, 1988-97			×
TOYOTA Landcruiser, 1990-97	✓	✓	×
MITSUBISHI Pajero, 1992-98	✓		o
TOYOTA 4Runner/Hilux, 1986-88	✓		o
TOYOTA 4Runner/Hilux, 1989-97	✓	×	×
TOYOTA Landcruiser, 1982-89	✓	×	×
DAIHATSU Feroza, 1989-98		o	na
DAIHATSU Rocky, 1984-98		o	na
HOLDEN Jackaroo, 1982-91		o	na
MITSUBISHI Pajero, 1982-90		o	o
NISSAN Pathfinder, 1988-94		o	na
NISSAN Patrol, 1982-87		o	na
SUZUKI Vitara, 1988-98		o	o
TOYOTA 4Runner/Hilux, 1982-85		o	×
HOLDEN Drover, 1985-87 /		×	o
SUZUKI Sierra, 1982-98			o

COMMERCIAL VEHICLES

FORD Falcon panel van, 1982-95	✓	✓	o
NISSAN Navara, 1992-96	✓	✓	na
FORD F-Series, 1982-92	✓		na
FORD Falcon Ute, 1982-95 /			
NISSAN XFN Ute, 1988-90	✓		×
HOLDEN Commodore Ute VG/VP, 1990-93		o	o
HOLDEN Commodore Ute VR/V5, 1994-98		o	×
HOLDEN Rodeo, 1982-85		o	×
HOLDEN Rodeo, 1989-95		o	o
HOLDEN Rodeo, 1996-98		o	o
HOLDEN Shuttle, 1982-87		o	na
HOLDEN WB Series, 1982-85		o	o
NISSAN 720 Ute, 1982-85		o	o
NISSAN Navara, 1986-91		o	o
TOYOTA Hiace/Liteace, 1987-89		o	×
TOYOTA Hiace/Liteace, 1990-98		o	×
VOLKSWAGEN Caravelle/Transporter, 1988-98		o	na
TOYOTA Hiace/Liteace, 1982-86		×	o
SUBARU Brumby, 1982-93		×	o
SUZUKI Mighty Boy, 1985-88		×	na

na No rating possible — insufficient data.

The study

The used car safety ratings are based on a study by the Monash University Accident Research Centre that looked at the police reports of more than 600,000 serious crashes on Queensland, NSW and Victorian roads where someone was injured or killed, and involving cars built between 1982 and 1998.

The Australian Transport Safety Bureau, NRMA, NSW RTA, Queensland Transport, RAC Victoria, RAC WA and VicRoads provided funding and assistance.

Away from base

Cordless phones are one of the most popular appliances of all. And one of the cheapest models in this test was also among the best.

IT'S NOT OFTEN WE GET A RESULT LIKE this. For less than \$100, you can buy a cordless analogue phone with a good range (both inside the house and out), good battery life, and sound as clear as almost any other tested. In fact the only thing not offered by the UNIDEN XC610 is a high level of security. As with most analogue phones, your calls could be overheard by someone using a scanner, or sometimes even a similar model of phone elsewhere in the neighbourhood. Digital calls can't be overheard in this way.

But wait! The UNIDEN DX834 analogue model encodes all calls, and it costs just \$125. Suddenly one good reason for going digital, which can require you to spend up to three times as much, starts to look a little shaky.

How long can you natter?

Five of the analogue phones gave 10 hours or more of talk time before needing to be recharged, while the RADIOSHACK 430-9808 and DSE F7023 only just passed five hours for talking. So these two phones will need more frequent recharging.

The digital AUDIOLINE CDL900 had the shortest talk-time at just five hours, and the best digital model (the UNIDEN DG940, at seven hours) still didn't match the analogue phones.

Digital phones are likely to offer less talk time because they use more power, especially when the handpiece is well away from the base station. However, they can control the output power and can therefore increase power when signal strength drops.

All but the DSE F7023 (10.5 days) and the RADIOSHACK 430-1048 (12 days) comfortably



TERRY HANN

lasted a fortnight on standby. All these standby times seem long enough, so we haven't listed them in the table.

How far can you roam?

If you live in a house with reinforced concrete internal walls, or want to be able to go out into a garage clad with corrugated iron, the extra power of a digital phone will help overcome the effects of metal, which tends to weaken the signal strength. And if you live somewhere like a hobby farm, you could find the kilometre-plus range of the UNIDEN DG940 pretty handy.

Continued overleaf

IN BRIEF

■ Most of the models in this test — both analogue and digital — did well. You can pretty well buy based on the features you want, or on price.

■ All digital models are secure from eavesdropping, while only one analogue in the test is — the UNIDEN DX834 which is a lot cheaper than most digital phones.

■ You get more talk time with the top-scoring analogues than with any of the digital models tested.

WHAT TO BUY

ANALOGUE PHONES

PANASONIC KX-TC1060ALW \$279

UNIDEN XC610 **BEST BUY** \$96

UNIDEN DX834 \$125

DIGITAL PHONES

UNIDEN DG940 \$290

WHAT'S IN THE TEST?

We set an upper limit of \$300 and bought a range of phones under this price, including the cheapest analogue phone in each brand, plus a digital phone if there was one in this price range.

But it's worth noting that although digital phones are promoted for their range, several analogue phones in this test in fact outperformed two of the digital phones in outside conditions — see the table on page 21 for details.

Inside, the more walls there are, the less effective these phones may be over their rated distance. The **RADIOSHACK 430-1048**, **AUDIOLINE FF788** and the **PANASONIC KX-TC1005ALW** analogue phones could work up to only 15, 30 and 35 metres respectively when tested with walls in the way.

Sound quality

Good sound quality involves clarity and volume, with freedom from line noise and interference. The digital phones were uniformly good.

Among the analogue models, the **UNIDEN DX834** had some problems with clarity, and the **PANASONIC KX-TC1005ALW** suffered from line noise.

The **PANASONIC KX-TC1060ALW** sound quality was remarkably good, rating ahead of the digital phones. The **UNIDEN XC610** was nearly as good as the best digital models.

Do you need a secure line?

You may not know if security is really going to be a problem. But for peace of mind you may feel more comfortable using a phone that encodes the signal if, say, you're in the habit of using the phone to book tickets with a credit card. All the digital models and the **UNIDEN DX834s** have security encoding.

ELECTRO-MAGNETIC RADIATION (EMR)

Is radiation an issue for cordless phones? The question is more commonly asked of mobiles, where the scientific jury is still out on whether there's a problem. Any possible risk will be even lower with cordless phones because they have a much lower power output and, in the case of analogue phones, also use different frequencies.

In Australia they have to comply with the same regulations for EMR as mobile phones, which are among the most stringent in the world. But if you're concerned, the same precautions apply as for mobiles: use a standard phone as often as possible and try not to talk for too long on other phones.

Battery types

All the tested phones conveniently recharge when you place them back in the cradle. But there's a catch: most of the phones in our test have NiCad batteries, which can suffer from a 'memory drain' effect: if you recharge them before they're fully run down, they may only use the new store of energy before needing to be recharged again. Phone manufacturers often advise that the phones be fully discharged before recharging, which means you'll be without the phone for a while.

Only two models, the **AUDIOLINE FF788** and **CDL900**, have nickel metal hydride (NiMH) batteries, which don't have this problem.

All but two models in the test recharged in 8–15 hours or so; the **AUDIOLINE FF788** took around 20 hours. Because it has a long talk time, though, it's unlikely to run flat in normal use if recharged regularly. And as it has a NiMH battery, it can be topped up frequently without worrying about memory effects. The **RADIOSHACK 430-9808**, which took around 23 hours to recharge, doesn't have these advantages.

What to look for

Before you buy a cordless phone, work out what you want it for.

- If you want to make calls from as far as one kilometre from home base, a digital phone may be the answer. In this test, the **UNIDEN DG940** could handle this range.
- Check how much REN (ringer equivalence number) you're already using before buying. Your phone line limit is usually 3 REN for all appliances on the line, such as a fax, computer and other phones. You may have to shop for a low-REN cordless phone to stay within the limit.
- Most cordless phone base stations rely on mains power. You should have an additional ordinary phone in case of an emergency when there's a power failure, as the base station will shut down.
- If you want to talk to other members of the family on a large property, a phone with multiple handsets and an intercom facility could be very useful. Unfortunately, in this test only the **PANASONIC KX-TC1060ALW** and **RADIOSHACK 430-9808** have an intercom, and only the **DSE F7073** has multiple handsets available. The **AUDIOLINE FF788** has a technically similar model, the **FF888-2**, which has multiple handsets.
- Check that there's enough talk time and standby time for your needs.
- Choose a multi-channel model, so that you can change channels in case of interference. Some models do this automatically.
- Look for large, clearly labelled keys, with backlighting of the keys for use in poor light.
- Try the handset to ensure that it's not too heavy, is comfortable to hold and fits well to your face.

Features they all have

All the phones have the following common features:

- Ten or more **channels**.
- **Autoscan**, which automatically picks the best channel when a call is answered. All also have either a manual channel change button to look for a channel with less interference, or an automatic feature that does this whenever interference is a problem.
- **Redial** function for the last number called.
- A # (hash) key, which may be needed for automated telephone services.
- **Auto standby and auto talk**. If the handset is in the base station and you receive a call, all you need to do is pick up the handset and talk. To hang up, you can press the talk button or put the phone back on the base.
- **Low-battery warning**. Either a dedicated light, or the talk button flashes.
- Compatibility with **hearing aids**.
- A **security code** to prevent others from using your base station to run up bills.

PROFILES

Models in the *What to buy* list are profiled in rank order from left to right. Prices shown are a good target to aim for, based on our nationwide checks in October 2000. Anything lower is a bargain.

ANALOGUE

PANASONIC KX-TC1060ALW

Target price: \$279

GOOD POINTS

- Best performance and overall scores. (See note 16, page 21, for what was included in the performance score.)
- Easy to use.
- Good range.
- Long talk time.
- Intercom and two-way paging.
- Speaker phone on base.
- Answerphone
- The ease-of-use panel liked the comfort and feel of the handset.

BAD POINTS

- Conversations aren't secure.



PROFILES: TERRY HANN

UNIDEN XC610

Target price: \$96

GOOD POINTS

- Very good performance and overall scores.
- Easy to use.
- Good range.
- One of the cheapest to buy.
- Good sound.
- Second-longest talk time.

BAD POINTS

- Conversations aren't secure.



**BEST
BUY**

DIGITAL

The only reason we can see to spend the extra money on a digital over an analogue phone from the models in this test is for the greater range (around 1 km) the **UNIDEN DG940** offers.

UNIDEN DX834

Target price: \$125

GOOD POINTS

- Good performance score.
- Easy to use.
- Security encoding, so conversations are secure.
- Good range.

BAD POINTS

- Line clarity not so good.
- The handset is quite bulky.



UNIDEN DG940

Target price: \$290

GOOD POINTS

- Good performance and overall scores.
- Easy to use.
- Longest range (around 1 km with minimal obstruction).
- Secure conversations.
- Very good sound.
- Answerphone.
- Back-up battery system.
- Headset port.
- Optional headset.

BAD POINTS

- Comparatively short talk time.



SAFETY

A phone can't be used without an Australian Communications Authority (ACA) sticker (see below), which certifies its compliance with local network connection protocols. These protocols include a requirement for all phones to have a security code that prevents other phones dialling out through your base station. They must also be compatible with hearing aids, and not interfere with other appliances.

Though you can legally buy and sell a phone without a sticker, you can't legally connect it to the phone system. All the tested phones had an ACA sticker, and came with a safety-approved low-voltage transformer.



What about the rest?

- The other analogue models had lower performance scores than the three in the *What to buy* list (considerably lower in the case of the **RADIOSHACK 430-1048**, which scored only 47%). See note 16, page 21, for what was included in the performance score.
- The other two digital models had slightly lower scores

than the **UNIDEN DG940**, though are still worth considering — particularly the **DSE F7030-900 MHZ**, with a target price of \$177 (the other two digital models are over \$200). But if you want a digital model mainly for security, the analogue **UNIDEN DX834** provides security encoding too and has a target price of only \$125.

CORDLESS PHONES

Brand / model (in rank order within groups)	Manufacturer / distributor	Origin	Target price (\$)*	Warranty (years)	Battery type	Wall mountable	REN	Paging	Intercom	Base station speaker phone	Answer phone	Speakers
Analogue												
PANASONIC KX-TC1060ALW	Panasonic	Japan	279	1	NiCad	✓	0.1	✓	✓	✓	✓	✓
UNIDEN XC610	Uniden	China	96	1 (C)	NiCad	✓	0.6	✓				✓
UNIDEN DX834	Uniden	China	125	1 (C)	NiCad	✓	0.6	✓				✓
DSE F7023-10 channel (A)	Dick Smith	China	77	1	NiCad	✓	0.5	✓				
RADIOSHACK 430-9808	Tandy	China	175	1	NiCad	✓	0.6	✓	✓	✓		
PANASONIC KX-TC1005ALW	Panasonic	Malaysia	139	1	NiCad	✓	0.1	✓				✓
AUDIOLINE FF788 (B)	Doro	China	95	1	NiMH	✓ (D)	0.5	✓				✓
RADIOSHACK 430-1048	Tandy	China	199	1	NiCad	✓	0.5	✓				✓
Digital												
UNIDEN DG940	Uniden	China	290	1 (C)	NiCad	✓	0.1	✓			✓	✓
AUDIOLINE CDL900	Doro	Korea	229	1	NiMH	✓	0.5	✓				✓
DSE F7030-900 MHz	Dick Smith	China	177	1	NiCad	✓	0.5	✓				✓

* Prices shown are a good target to aim for when shopping around, based on nationwide checks in October 2000.

(A) Multiple handsets available.

(B) Model FF888-2 is technically identical, but comes with two handsets and can have up to two more handsets added.

(C) A 90-day warranty on accessories, for example the AC adaptor and plugs.

(D) The accessory kit has to be purchased from the retailer or Doro Audioline.

(E) Has 10 memories on the handset and five on the base.

(F) Has 10 memories on both the handset and the base.

(G) The ring volume is adjustable.



Backlit keys make it easy to use the phone in poor light.

What's Orange 1?

The Orange 1 company offers a service that's a combination of cordless and mobile phone. It lets you choose an area about the same size as an average household property, called your LocalZone. You can make local calls in this area at an untimed rate of 15–20 cents. Calls within your LocalZone have a normal eight-digit number, and if you begin a call within your LocalZone but wander out of it while talking, the call remains at the local rate. However, if you wander too far, moving outside the area of your local 'cell', the call will drop out and you'll be charged at the mobile rate if you ring it again. You can change your LocalZone up to three times a year free of charge.

If you move out of your LocalZone to make a call, the phone becomes a mobile with a mobile phone number and charges. You can divert your local number to the Orange 1 mobile number, but you'll be charged 11 cents a minute for incoming calls.

Coverage is currently limited to the Sydney and Melbourne regions, but if you're in Sydney calling another Orange 1 phone, say in its LocalZone in Newcastle or Wollongong, the charge is 15 cents, untimed. This could be handy if you have relatives or friends you call regularly.

1 Battery type

NiCad = Nickel-cadmium, NiMH = Nickel metal hydride. See *Battery types*, page 18, for more on batteries.

2 Wall mountable

The base station can be fixed to a wall with hardware that's supplied (but see footnote D, above).

3 REN

Ringer equivalence number. Anything you connect to your phone line draws from the line's capacity. The amount drawn is the REN, which is usually printed on the bottom of the appliance. Generally the maximum line capacity is 3, so if your total REN of faxes, modems, phones, etc., exceeds that, you may find that something won't work — for example, your phone may not ring.

4 Paging

You can page one way, from base to handset, which might be useful for locating a mislaid handset.

5 Intercom

Allows two-way conversation and paging between handset and base.

6 Base station speaker phone

The base station can be used as a standalone phone, as it has a keypad, microphone and speakers.

	10	11	12	13	14	15	16	17	18	
Speed of transmission	Speed dial memories	Talk time (hours)	Recharge time (hours)	Range, house to outside (m)	Range, inside house (m)	Ring level (dB)	Performance score (%)	Ease of use score (%)	Overall score (%)	Brand / model (in rank order within groups)
E	10 + 5 (E)	10	14.5	500	60	82 (G)	89	82	87	PANASONIC KX-TC1060ALW
	10	12	11.5	500	60	78 (G)	85	76	83	UNIDEN XC610
	10	11	8.5	500	60	80 (G)	82	77	80	UNIDEN DX834
	10	5	13.0	500	60	64 (G)	78	69	75	DSE F7023-10 channel (A)
	10 + 10 (F)	5	23.0	500	45	77	73	75	74	RADIOSHACK 430-9808
	11	10	14.5	500	35	87 (G)	67	83	72	PANASONIC KX-TC1005ALW
	9	15	21.5	250	30	77	66	74	68	AUDIOLINE FF788 (B)
	10	6	8.0	100	15	74	47	67	53	RADIOSHACK 430-1048
F	20	7	11.0	1000	100	83 (G)	81	78	80	UNIDEN DG940
	20	5	15.0	400	100	77 (G)	76	74	76	AUDIOLINE CDL900
	10	5	8.5	150	100	67 (G)	73	65	70	DSE F7030-900 MHz

7 Answerphone

A digital answering machine (not tested) is built into this model.

8 Speech volume control

Allows you to adjust the volume of the caller's voice if the signal is either weak or too strong.

9 Encrypted voice transmission

The signal from base to handset and return is sent in code so that it can't be overheard by someone using a scanner or even another similar phone.

10 Speed-dial memories

You can store frequently used numbers using short (one- or two-digit) codes. The two models with base station dialling and a speaker phone have extra memories for the base station.

11 Talk time

The number of hours the phone lasted in talk mode, rounded down to the nearest whole hour.

12 Recharge time

The number of hours it took for the fully discharged battery to recharge to 98% of its maximum voltage.

13 Range: house to the outside

The base station was set up where there was a relatively unobstructed path to the outside, and the distance measured at which both voice transmission could just be heard and a dial tone received.

14 Range: inside a house

The inside range was measured through walls to check the effect of obstructions. The results are for comparison purposes only because different wall materials will have different effects on performance. The range in your house may be different from our results.

15 Ring level

Measured at one metre from the handset (not on the base) at its highest level.

16 Performance score

The performance score is a combination of the following measurements and user panel assessments:

- Talk time: 10%
- Standby time: 10%
- Range (inside and outside): 40%
- Speech quality: 20%
- Speech level: 10%
- Background noise reduction: 10%

17 Ease of use score

A panel assessed the following criteria (all weighted equally):

- Clarity and completeness of the instruction manual.
- Layout of keys and controls.
- Readability of the numbers and labels.
- Feel and comfort of the handset.
- Ease of changing channels.
- Ease of cleaning the phone.

18 Overall score

The overall score is a combination of:

- Performance score: 70%
- Ease of use score: 30%

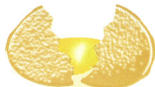
NICE TRY, BUT...

The radio receiver of the **RADIOSHACK 430-1048** is designed to clip onto your belt, with a headset including a microphone earphone. Though the receiver has large, easily read numbers in a simple layout, our panel disliked the way it felt in the hand. It's also less convenient for changing channels, as you have to do it by feel or take the receiver off your belt.



TERRY HARRIS

The egg case cracked wide open



From boiling an egg without an explosion to telling a fresh one from an old one — we'll make you egg-savvy in less than three minutes. And just how chook-friendly are the production methods?

EGG STATS

- Australia produces around 200 million dozen eggs per year.
- The average Australian eats about 140 eggs a year.
- 92% of eggs are from battery (caged) hens, including 1% vegetarian and 2% omega-3 eggs; 2.5% are barn-laid and 5.5% are free-range, including 0.1% organic.
- There are about 1000 egg producers in Australia, but of these, eight producers own 45% of the flock.
- Barn-laid and free-range eggs cost around a dollar more per dozen than eggs from caged hens.

What's so good about eggs?

Because they're a complete food to support the embryo chicken, they're very nutritious.

Eggs contain every vitamin except vitamin C, a number of minerals including iron and zinc, and are a good source of protein.

Can I eat eggs if I have high cholesterol?

Eggs do contain cholesterol (in the yolk), but it's now known that for most people the amount of saturated fat you eat (predominantly found in meat and dairy products) is much more important for your risk of heart disease than the amount of cholesterol you eat.

If your blood cholesterol is in the normal range, it's OK to eat eggs and other foods that are high in cholesterol (such as some offal and seafood). If your blood cholesterol is high it might be a good idea to limit these foods to only a few times a week, because they can have some influence on your blood cholesterol level if it's already high.

How should I store eggs?

Eggs are best stored in their carton in the fridge. The carton reduces water loss and helps prevent flavours from other foods being absorbed into the eggs. Also it protects the eggs from knocks from other foods. Storing eggs loose or in those

designated 'egg houses' in the fridge door doesn't offer the same protection.

And it's not an old wives' tale that you shouldn't wash the eggs before storage. This removes the protective surface coating and makes the eggs more vulnerable to attack by micro-organisms. Dirty eggs shouldn't be stored at all, but used straightaway.

If eggs last better in the fridge, why don't retailers keep them there?

By law, potentially hazardous foods are required to be kept below about 5°C so that pathogenic bacteria (the ones that can make you sick) and toxins don't grow (or grow only very slowly). But eggs aren't classed as a hazardous food in Australia (see *How safe are eggs?*, right). So while they'll last longer in the fridge, it's a quality issue, not a safety one, and it's up to retailers whether they find space in their refrigerated display cases or not.

How long do eggs last?

If you keep your eggs in the fridge they should stay in good shape for at least six weeks. If you store them at room temperature they'll last only about a week.

Usually the 'use by' or 'best before' date stamped on egg cartons corresponds to four weeks after packing, so from that you can work out how old your eggs are when you buy them.

How can I tell if an egg is fresh?

A quick check for freshness is to pop the raw egg in its shell in a bowl of water. If it sinks to a completely horizontal position it's very fresh; if it tilts up slightly it's probably around a week old and if it floats it's probably far from fresh. The most likely reason this test wouldn't work is if an egg had a weak shell or fine cracks, which can also cause it to float.

So what's the theory behind the test? It's to do with the air pocket at the wide end of the egg. In a really fresh egg it's very small; as the egg ages, water is lost and the air cell gets bigger. If you hard-boil an old egg the air cell indentation can be clearly seen at the wide end of the egg when you remove the shell. Also, if you cut the egg longways you can see that the yolk is off-centre.

Another test is to crack open the egg and have a look. In a really fresh egg the yolk is rounded and stands up high in a thick gelatinous layer of white that clings all around the yolk, with a thinner outer layer. When the egg gets older the yolk gets flatter; and the two separate textures of whites are not as obvious, as the inner one becomes thin and runny, no longer keeping the yolk in place.

Cooking fresh versus old — is there a difference?

If you're frying or poaching an egg, fresh is best. With frying, you get a nice neat, rounded shape. With older eggs you end up with a flat pancake-like effect. When poaching, older eggs disintegrate, with the white and the yolk coming apart. **Tip:** add a bit of vinegar to the water to stop this happening.

Fresh eggs are also best for making meringues or a soufflé. The older the eggs, the harder it is to whisk the whites up into a good foam. Adding a little vinegar or lemon juice helps.

Separating older eggs for cooking is difficult because the membrane round the yolk weakens with age and so breaks more easily.

Peeling really fresh hard-boiled eggs is hard — the inner skin (the safety net that would have protected the chick if the egg had been fertilised) is really taut, making it very hard to get the shell and skin off. When the egg is a week old the skin slackens and it's easier to peel.

For scrambled eggs, omelettes and soft-boiled eggs, the fresher the better, but up to a few weeks old is fine. Mind you, having too fresh an egg isn't a luxury most of us have. Unless you've got your own chooks or you're buying direct from a farm, the eggs will usually be at least four days old before you get them.

For baking and recipes like quiches, older eggs are fine.

How safe are eggs?

There have been a number of food-poisoning outbreaks associated with eggs in the US and the UK due to a particular strain of the salmonella bacteria, *Salmonella enteritidis*. It infects the

ovaries, and hence the eggs, of some hens. This strain hasn't been

detected in Australian eggs to date, so it's not necessary to take the same precautions as is recommended in these countries. (In the US, for example, the Food and Drug Administration recommends not buying unrefrigerated eggs; not

eating raw eggs; storing eggs in the fridge at home; and washing hands, utensils and work areas with warm, soapy water before and after contact

with eggs and egg-rich foods).

To be on the safe side, don't serve raw eggs (such as in home-made mayonnaise, home-made ice cream or eggnog) to vulnerable people, such as very young children, pregnant women, the elderly or anyone weakened by serious illness.

What are those red flecks in eggs?

They're blood spots, usually caused by the rupture of blood vessels during ovulation. Blood spots don't indicate a fertile egg and they're nothing to worry about.

Why do hard-boiled eggs turn green round the edge of yolk?

The blue-green colour around the yolk is iron sulphide. It's produced by a reaction of the iron in the yolk with the hydrogen sulphide in the white. It doesn't

EGG TRIVIA

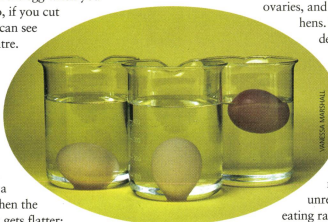
■ A hen takes 24 to 26 hours to produce an egg. Thirty minutes later she starts again.

■ An eggshell can have as many as 17,000 tiny pores over its surface, through which the egg can absorb flavours and smells.

■ Eggs age more in one day at room temperature than after one week in the fridge.

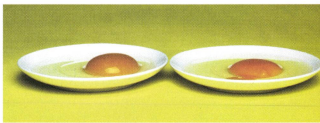
■ Eggshells come in various shades from white to brown. The shell colour doesn't affect either the quality or nutritional value of the egg, and there's no difference in taste.

■ Yolk colour depends on the hen's diet. Grass, maize, carrot and pumpkin all produce a darker yolk.



Which is the freshest egg?
See above left.

A fresh egg (below left) has a high rounded yolk surrounded by a thick layer of white; as it gets older the white gets thinner and the yolk flatter.



VANESSA MARSHALL



An "intensively housed system" means a hen is likely to have floor space less than the size of this page and a ceiling just high enough for her to stand up.

and weight; very underweight hens will produce small eggs. The quality of their diet and the climate also affect egg size — for example, hens eat less in warmer weather, usually resulting in smaller eggs.

How do I prevent eggs exploding when boiling?

Simple: take them out of the fridge 30 minutes before boiling. If you can't think that far in advance, run them under cold water, gradually warming it to bring the temperature up. Put them in cold rather than preboiled water in the saucepan, and then bring them to the boil (they take roughly three minutes from the water starting to boil to produce a soft yolk with a hard white). And don't just chuck them in, lower them in carefully on a spoon.

Do hormones fed to chooks end up in my eggs?

The rumour that chickens are fed hormones appears to be just that. There are none registered for use in the poultry industry in Australia.

Antibiotics are used in the industry, but according to the Department of Agriculture, the available data indicates that no residues end up in the eggs.

happen in soft-boiled eggs because they're not heated enough to release the iron and hydrogen sulphide.

Do larger eggs come from healthier chooks?

A number of factors contribute to egg size. The main one is the age of the hen — older hens lay larger eggs. Then there are breed

What about the chooks?

Worried about the hens? Want to make more than a stab in the dark when trying to choose the 'right' egg? Here's how to make a more informed decision next time you buy.

Labelling egg cartons with the production method isn't yet a requirement but it soon will be, as a result of a current government review of the egg industry.

However, if the egg industry gets its way, the description of the caged-hen egg production method will be... er ... creative — see the photo and caption, below left.

The following are the various methods for producing eggs.

Where do 'regular' eggs come from?

Anything labelled as just 'eggs' comes from hens kept in small wire cages holding up to five birds. Each bird has a minimum floor space of about 500 square centimetres (less than the size of a page of CHOICE) and the minimum height of the cage is 40 cm; just high enough for hens to stand up. Hens in cages have their beaks trimmed (see *What's beak trimming?*, below right, for more on this).

What are 'barn-laid' eggs?

These eggs come from chickens housed in large barns, divided into pens, with each containing up to 1000 birds. They have the freedom to spread their wings, stretch and socialise, as well as dust-bathe, perch and scratch for food.

Barn-laid egg producers are generally accredited by the RSPCA, which endorses this system as a more humane alternative to the caged system. The RSPCA allows beak trimming, which is used in both the barn and cage systems as well as some free-range systems.

What are 'free-range' eggs?

These eggs come from hens that are free to move over an area of open ground during the day.

The RSPCA hasn't endorsed any free-range farms to date because of concerns about the vulnerability of birds to weather and attack from predators. Other animal welfare groups, however, don't share this concern.

Victoria, Queensland and NSW have free-range egg producers' associations that certify eggs meeting their strict criteria (see *What logos should you look for?*, far right). Beak trimming is not allowed by these associations.

In supermarkets you'll see a number of other eggs labelled as free-range from larger producers. Usually they're not certified and follow either their



"Cage eggs are laid by hens housed in small, stable social groups in cages protected from the elements, predators and their manure" — sounds nice, doesn't it? If the Australian Egg Industry Association (AEIA) gets its way, this is what'll appear on cartons of eggs produced from caged birds. This is the definition it put forward in its draft policy paper on egg carton labelling. We'll let the picture tell the story.

SOURCE: RSPCA

own internal free-range guidelines or those of the Australian Egg Industry Association (AEIA).

The AEIA free-range guidelines are curious in that one says "beak trimming is not permitted", while the very next says "if the bird's welfare is at risk, minimal beak tipping is permitted". As far as we're concerned it's a question of semantics, and once a bird's beak is trimmed or tipped, we'd question whether this is what consumers expect when they buy free-range eggs.

What are 'vegetarian' eggs?

These eggs come from hens that are fed a diet with no meat or fish ingredients. Usually, the eggs come from caged birds, although the RSPCA recently endorsed some barn-laid vegetarian eggs.

Free-range hens can't produce 'vegetarian' eggs because there's no way to control what they find or pull out of the ground to eat.

What are 'omega-3' eggs?

These eggs come from hens that are fed a special diet containing a higher proportion of omega-3 fatty acids and vitamin E, producing eggs with higher omega-3 fat content. 'Omega-3' eggs usually come from caged birds.

Omega-3 fats are important in the diet, but it's not easy to eat enough of them. They're good for the heart and can also lower blood pressure. The best source is fish and fish oil, and now eggs. For more on omega-3s, see *Fats ain't fats*, CHOICE, October 2000.

What are 'organic' eggs?

'Organic' eggs come from farms that must first qualify for free-range status. The system is also free of synthetic pesticides, fertilisers, antibiotics and growth promoters, and the hens are fed organically grown grain. For more information on what's involved in organic farming see *Organic food*, CHOICE, September 2000.

Four organisations certify eggs produced under this system (see *What logos should you look for?*). Three of these allow feed to contain meat meal (ground-up abattoir waste), but the Bio-Dynamic Research Institute (Demeter) doesn't.

What's beak trimming?

Hens' beaks are 'trimmed' or 'tipped' because they're prone to behavioural problems when gathered together in high numbers — attacking each other, pecking feathers and even eating each other.

The process is routine for caged hens. The RSPCA agrees with beak trimming or tipping, but has strict guidelines on when it can be done and how much of

the beak can be taken off. However, other animal welfare groups say it's a cruel procedure that's only necessary because the animals are kept in cramped and crowded conditions.

Beak trimming and tipping aren't permitted by the state-based free-range associations in NSW, Victoria and Queensland (see *What logos should you look for*), or by the organisations that provide organic certification.

The free-range associations believe that if hens attack each other there's a fundamental problem with their management, usually to do with overstocking (too many hens for the area provided). They think the fact that the farmers they certify manage their flocks without beak trimming speaks for itself.

One of the outcomes of the government review of the egg industry is the development of a beak-trimming accreditation program enforced by national legislation.

How do you know what you're really getting?

Currently there's no specific government regulation of egg labelling, no industry-wide standards and little checking of claims, so you've no way to be sure you're getting what you think you're getting.

However, as a result of the recent egg industry review (see *Egg review*, page 26), by early 2002 there should be a national quality assurance program in place, including labelling requirements for production methods. Although there'll be third-party auditing of egg producers for compliance with the egg labelling standards, it's still going to be industry-driven and not legislated. This is far from adequate.

In the meantime, if you're looking for free-range or barn-laid eggs, your best bet is to buy ones that have been certified.

What logos should you look for?

■ RSPCA (top right).

This logo signifies endorsement by the RSPCA that the eggs have been produced in accordance with its standards (which specify such things as stocking levels, as well as requirements for nests, perch space, litter, etc). The RSPCA inspects farms at least quarterly to check compliance. As noted, it does allow beak trimming. You can buy these eggs at major supermarket chains.

Logos to look for — from top to bottom: RSPCA, FRPA of Victoria, FRPA of Queensland, FRPA of NSW.

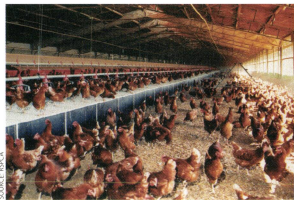
RSPCA
Prevent cruelty to animals and protect the RSPCA's animals

**ACCREDITED
FREE RANGE
FARM**

FREE RANGE EGG & POULTRY
ASSOCIATION OF VICTORIA INC.



Birds in barns can spread their wings, stretch, dust-bathe, socialise, perch and scratch for food.



SOURCE: RSPCA



This is an example of 'free-range' eggs from one of the large egg producers. The eggs aren't certified and aren't produced according to the strict guidelines of the free-range associations we've mentioned.

The eggs from the Victorian and NSW associations (their logos are on page 25) are generally not available at large supermarkets. If you ring the association it'll be able to tell you where you can buy in your area.

These logos signify endorsement that the eggs have been produced in accordance with the associations' standards (which specify such things as stocking levels, access to open-air runs during daylight hours, access to a weatherproof shed, nest

■ **Free Range Egg and Poultry Association of Victoria (FRPA of Victoria).**
Phone: 0500 537 372.

■ **Free Range Poultry Association of Queensland (FRPA of Qld).**
Phone: (07) 4696 7501.

■ **NSW Free Range Egg Producers' Association (FRPA of NSW).**
Phone: (02) 4572 3315.

boxes and perches). The associations inspect farms before certifying them, and do yearly inspections after that. They don't allow beak trimming.

The following organic-farming organisations also certify eggs:

- Bio-dynamic Research Institute (Demeter).
- Biological Farmers of Australia Co-op.
- National Association for Sustainable Agriculture (Australia).
- The Organic Food Chain.

For their logos and contact details, see the article on organic food in CHOICE, September 2000.

These logos signify endorsement that the eggs have been produced in accordance with their standards. (which include free-range and organic standards).

These eggs are usually only available at greengrocers selling organic produce. They don't generally produce enough to supply to supermarkets.

Does the battery cage system compromise hen welfare?

Well...there are always at least two sides to every story.

■ **The Australian Egg Industry Association (AEIA)** says: "A well managed modern cage system is the best way of meeting the animal welfare needs of hens, despite unsubstantiated and largely uninformed claims by animal welfare groups." It says this system delivers the best in terms of animal welfare, flock health, food safety, environmental impact, egg quality and workplace safety, and that it's supported by extensive scientific studies.

■ **The RSPCA** says: "Research shows the battery cage system causes great frustration to the hens because they cannot perform their normal behaviours — the hen cannot stand properly, preen feathers, stretch out, flap wings, lay in nests, perch, dust-bathe, socialise, and may have difficulty turning around. Battery cages can also cause serious damage to the feet and claws from the mesh floor and lack of perches. In addition, skeletal and muscle weakness can be caused by restricted movement and lack of exercise." The RSPCA maintains research has shown battery-caged hens suffer intensely and continuously.

■ **CHOICE** says: Within any system you can have good and bad management, and this of course will affect hen welfare. However, we think the caged system, while keeping the cost of eggs down, is far from ideal when it comes to hen welfare. Any alternative well-managed system providing hens with more space as well as an environment in which they can exhibit natural behaviour (such as nesting, foraging and scratching in litter) would have to be considered more humane. □

Egg review

At its August 2000 meeting, the Agricultural and Resource Management Council of Australia and New Zealand (ARMCANZ — the ministerial council responsible for agricultural policy) made recommendations for the Australian egg industry, as part of its current review.

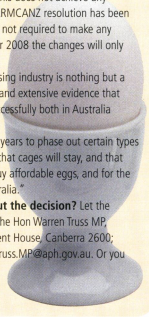
Top of the agenda was looking at the proposal to phase out battery cage hen egg production (following the example of the EU). The ministers agreed hen welfare was a most important matter. However, welfare considerations would not be divorced from food safety, biosecurity (disease control) matters and the economic realities of production". This clearly indicates its continued support for caged hen housing.

While the AEIA is obviously happy about this, the RSPCA is furious, saying the decision is "an utter joke and a complete disgrace — this does not achieve any welfare improvements for layer hens whatsoever. The ARMCANZ resolution has been deliberately and cynically drafted so that producers are not required to make any changes for at least eight years, and even after the year 2008 the changes will only apply to producers who have pre-1995 cages.

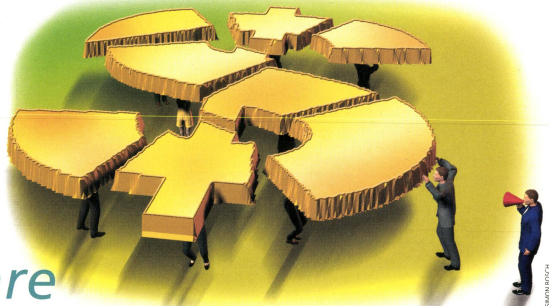
"Talk about further research into the layer hen housing industry is nothing but a smokescreen — there has been ample research done and extensive evidence that alternative methods of egg production are working successfully both in Australia and overseas."

While the AEIA isn't happy with having 'only' eight years to phase out certain types of old cages, it maintains that, "The important thing is that cages will stay, and that this is a big win for consumers, who can continue to buy affordable eggs, and for the many people employed in the egg industry across Australia."

What can you do if you've got concerns about the decision? Let the Federal Minister for Agriculture know what you think: The Hon Warren Truss MP, Minister for Agriculture, Fisheries and Forestry, Parliament House, Canberra 2600; phone (02) 6277 7520; fax (02) 6273 4120; email W.Truss.MP@aph.gov.au. Or you could contact your relevant state minister.



Australians invest something like \$13 billion in managed funds each year. How do they work?



What are managed funds?

MANAGED FUNDS GIVE SMALL investors the opportunity to invest in the 'big end of town'. Some types of managed funds are:

- Unit trusts.
- Retail superannuation funds.
- Allocated pensions and annuities.
- Friendly society bonds.
- Insurance bonds.

They all have key features in common:

- They're all professionally managed by a 'single responsible entity' (see *Who's responsible?* on page 28 for more on this).
- They all combine money from many small investors into a big pool that can be used to buy large investments.
- They all purchase investments to generate regular income, capital growth or a combination of income and growth for their investors.
- They all invest in one or more of the following: the domestic share market; overseas share markets; commercial or residential property; mortgages; cash; or fixed-interest investments (such as government bonds and bank bills).

Swimming in the big pool

The greatest advantage of managed investments is that they enable individuals to own part of an asset or a portfolio of assets that they usually couldn't afford to buy on their own.

If, for example, you had \$5000 and wanted to invest in the domestic share market, you could buy shares in companies as a 'direct investor' through a broker. Alternatively, you could purchase units in an equity (share) trust or fund, and the fund would then buy shares on behalf of all its unit holders.

As a direct investor, your \$5000 wouldn't go very far. You could only afford to buy a limited number of shares in a limited number of companies. If, on the other hand, you bought units in a domestic share trust, you could own a slice of a substantial (sometimes multi-million-dollar) share portfolio.

If you want to invest in property, \$5000 obviously isn't enough money to buy a property directly. But if you invest in a property trust, you could end up being a part-owner of shopping malls or city office blocks.

Unit trusts

It's not possible to examine all types of managed investment funds in this article, so we'll concentrate on one of the most popular types for small investors — unit trusts.

How to invest

Nearly all unit trusts must supply potential investors with a prospectus. This legal document sets out the types of investment the manager ('single responsible entity') can buy. It explains whether the trust is designed to generate

IN BRIEF

■ Managed funds give small investors the chance to have a diversity of investments for as little as \$1000 per investment.

■ The fund manager — a licensed investment professional — does most of the work for you.

■ Fees can be high and the performance of funds and their managers varies greatly, so you have to choose carefully.

Get tax advice

Recent changes to capital gains tax (CGT) rules may have made managed funds less attractive for some investors. So get tax advice before you invest.

The way a unit trust or managed fund investment is treated for taxation purposes will vary, depending on the type of trust or fund. For example, if you invest in a property trust, taxation is very complex. Income will be assessed for tax purposes; there may be deductions for property expenses and depreciation. You may also have to pay capital gains tax — so expert taxation advice is essential.

The new capital gains tax rules may encourage investors to expect managers to provide them with a clear policy on trading and to warn them of any imminent large distributions of trading profits that could leave them with a larger than expected capital gains tax bill.

BIG BUSINESS ...

Since June 1995, the managed funds industry has grown by over \$100 billion dollars, or an average of \$13 billion a year. This represents one of the fastest growth rates of any developed country. The Australian market is expected to grow to the sixth-largest of all managed funds markets by 2005.

income, capital growth or a combination of income and growth.

You complete the prospectus and return it to the manager. You'll then receive a number of units based on the amount of money you invest.

The minimum investment required by most trusts is \$1000 to \$5000 and you can buy additional units down the track.

Fees

You'll usually have to pay an upfront fee to join a unit trust. This can range from nil to 6%, depending on the type of trust.

Ongoing management fees may apply. They're shown in the prospectus and in statements issued by fund managers as the 'management expense ratio' (MER). This is the total of annual fees and other administrative expenses incurred by the manager, calculated as a percentage of fund's net asset value. The lower the MER, the less the manager is taking out of your profits.

You may also have to pay a fee to cash in your units and leave the trust or fund.

Who's responsible?

The Australian Securities and Investments Commission (ASIC) regulates managed investments. It sets standards for the operation of managed funds, and is responsible for licensing fund managers, recording the details of funds on a public register and registering prospectuses.

Prior to 1998, most managed funds had both a fund manager and a trustee, with responsibilities split between the two. However, there was some confusion about the legal responsibilities of those two entities. So since July 1, 1998, all managed funds have been run by a 'single responsible entity' — the manager. Under the scrutiny of ASIC, the manager has to set up and follow strict systems to protect the interests of investors and prevent breaches of the law.

ASIC monitors the sales practices and operations of fund managers and investigates and takes action against misconduct. It has regional offices in each state, with a national infoline on 1300 300 630, and a website: www.asic.gov.au.

The unit price

Each unit represents an equal share in the assets owned by the trust. The unit price gives you the value of each unit. It's set by the value of the trust's investments.

The unit price can go up or down. If it goes up, you make a capital gain on your investment. If it goes down, the value of your investment falls and you can lose money.

These price movements are determined by fluctuations in the markets the trust invests in. If the share market plummets, the unit price in a share trust will also fall.

What's the investment timeframe?

Look upon unit trusts as medium- to long-term investments. The minimum period should be five to seven years, but you can invest for much longer.

Risks and returns

Managed funds give you the opportunity to buy into both larger and more investments. This gives you diversity and should lower your risks because you're not putting all your eggs in one basket.

The trick is to hold on to your units in troubled times — you'll lose money if you sell investments then. But you'll make a profit if you sell your units when their price is higher than you paid. So hang on if you can when the value goes down.

Managed funds and unit trusts save you time and effort because the expert manager makes investment decisions. However, you can't forget about your investment altogether. In addition to monitoring the performance of the markets where the trust or fund invests (shares, property, bonds, etc) in the financial press, you also need to monitor the performance of the manager and its competitors to ensure they're giving you the best service and return on your investment. You can do this using the financial press too, plus research companies like ASSIRT regularly publish reports on the performance of different fund managers.

Choose carefully

Choose a fund or trust with an investment approach that matches your needs in terms of risk, balance between income and growth, investment duration and tax considerations. You'll probably need to talk to an accountant or tax specialist about the tax aspect (see *Get tax advice*, above).

It may also be wise to spread your investments across several fund managers and several types of unit trust to reduce your investment risk. □

UNIT TRUSTS*

When you're checking out unit trusts, this is the kind of information you'll see and what it means (explained in the notes below the table). The examples are five top-performing unit trusts within various types of investment.

Fund name, by type	Size (\$m)	1-year (%)	3-year(%)	5-year(%)	Rating**	MER (%)	Total returns (% 6 months)
Australian Equity Diverse + Index + Industrial							
Col First State Geared Share	98.3	33.66	33.13		★★★★	1.79	21.49
ANZ Aust Sharemarket Trust	21.1	22.68	21.77	17.10	NR	1.83	11.77
AMP Equity	291.1	21.50	20.80	18.15	NR	2.00	11.77
AMP Blue Chip	161.2	19.56	20.53	17.53	NR	2.00	11.77
ANZ Dividend Imputation Trust	209.1	21.86	20.29	17.88	NR	1.72	9.96
Australian Fixed Interest							
PTQ Aust Fixed Int	48.7	6.18	9.51		★★★★	1.64	24.49
UBS Inflation Linked Bond	71.7	8.56	7.34	8.57	★★★	0.37	13.81
UBS Australian Bond	337.8	7.92	5.15	8.63	★★★★★	0.42	11.77
Col First State Wsale AustBond	32.2	7.61	5.10		★★★	0.46	13.82
IOOF Flex Tr FI	6.0	6.97	5.06	7.93	★★★	1.12	11.77
Diverse OS Equity + Global Equity							
Dresdner Internat Opport	51.7	43.47	34.31	26.09	NR	1.85	18.61
MLC Platinum Global Fund	1025.7	45.28	32.68	25.35	NR	2.22	16.09
Platinum International Fund	134.7	44.41	31.14	24.49	★★★	1.50	18.61
ABN AMRO Global Equity Fund	435.5	34.80	26.67		NR	0.90	13.95
Col First State Global Share	171.4	27.29	25.81		★★	2.05	16.29
Property Securities							
STL Premium Property Fund	22.1	12.75	10.03		NR	0.88	16.13
Col First State Prop Sect	137.9	10.52	9.64	11.23	★★★★	1.50	18.61
UBS Property Securities	10.0	11.53	9.46	11.08	NR	0.66	18.61
C'wealth Property Securities	75.8	10.18	8.76		NR	1.66	21.42
Paladin Property Securities Fd	364.3	10.00	8.75	11.32	On hold	0.75	18.61
Multi Sector 30 (A)							
Col First State Conservative	83.2	9.59	8.20	9.14	★★★★★	1.28	3.14
UBS Defensive Investment	55.7	10.09	7.89	9.61	★★★	0.71	4.74
AMP Conservative	136.7	8.99	7.68	8.45	NR	2.00	1.61
MLC MKey Unit Tr Inc Fd	79.6	8.62	7.23	8.56	NR	1.77	5.77
HSBC LifePath Monthly Income	4.6	8.17	7.11	7.85	★★★	1.50	3.88
Multi Sector 70 (A)							
C'wealth Growth Fd	468.2	18.78	14.55	13.71	NR	1.64	6.97
Col First State Divf Fd	690.2	15.21	14.26	14.69	★★★★	1.75	4.74
ANZ Balanced Trust	100.4	15.55	13.87	12.87	NR	1.88	3.87
Inv Serv Experts Ch Bal	27.9	17.33	13.62		NR	2.50	5.79
Perpetual Inv Ch Bal Growth	83.3	15.92	12.61	12.30	★★	1.95	5.77

(A) These invest in a range of fixed interest, mortgages, property and shares.

* Data from ASSIRT, current as at October 31, 2000. All care has been taken to ensure data is accurate and complete. However, past performance is no indication of a fund's

future performance. Don't make investment decisions without thoroughly reading the prospectus and seeking expert financial advice.

**NR means ASSIRT currently doesn't give a star rating for this trust.

1 Performance

Performance tables like the one above can show you how consistent a fund's performance has been over a number of years. The table shows the five top-performing unit trusts (ranked on their performance over three years) in each sector.

2 Rating

The ASSIRT star ratings (where available) are based on a combination of analytical models,

quantitative techniques and qualitative research. The ratings (five being the highest) give a guide to an investment manager's capabilities and the likelihood that each trust can meet its stated objectives. For more on what they mean, go to www.assirt.com.au.

3 MER (%)

The MER (management expense ratio) shows you the total management fees you'll pay

each year as a percentage of the fund's net asset value.

4 Negative total returns (% six months)

This is an indication of the risk of capital loss over any six-month period — so a lower number is better. It's based on the number of negative monthly returns over five years.

Wow, it's summer and now is the time to make sure your pool or spa is clean, healthy and usable!

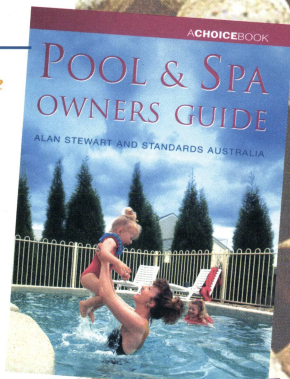
**Half price for January,
February and March 2001**

Pool and Spa Owner's Guide

Find out how to maintain a trouble-free swimming pool or spa and save money at the same time. This guide, based on the relevant Australian Standards, tells you what to look for when choosing a domestic pool or spa and how to keep the water clean and healthy. It also offers lots of practical advice for anyone installing their own pool or spa. As well, it will help you choose filtration and heating systems, including solar heating, provides guidelines for pool fencing, and answers common questions about pool and spa maintenance. Illustrated with easy-to-follow diagrams.

Until the end of March available at the special price of

\$13.75 Code: PSOG



What to Do When Someone Dies

Stella Tarakson

On the whole, most of us don't like to think about death — either the death of loved family or friends, or indeed our own death — and mostly we don't talk about it either. This often leaves us with no idea of the practical steps we need to take when someone close to us dies.

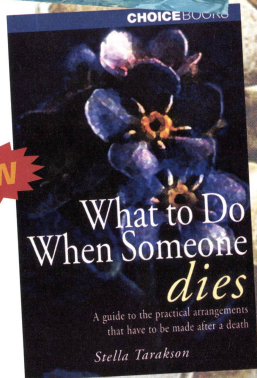
- What's the first thing to do if someone dies at home?
- Who do I have to notify?
- How do I arrange a funeral?
- How do I obtain a death certificate and why do I need it?
- What other documents do I need to find and where will I look for them?
- What happens if there's an inquest?
- Can anyone provide help with day-to-day living expenses?
- What do I have to do if I'm the executor of the will?

You need quick answers to these questions, and all at a time when you're least able to cope with the pressure.

Drawing on personal experience as well as her legal knowledge, the author of *What to Do When Someone Dies* provides step-by-step practical information. She includes useful checklists and simple explanations of technical terms and jargon, and explains complex legal matters such as wills, intestacy, probate and estate distribution, as well as the duties of an executor or an administrator. She also provides useful information for people who would like to plan ahead and sort out their affairs before their own death: the importance of making a will, estate planning, power of attorney and financing a funeral.

\$20.00 Code: WTDD

NEW



Put It In Writing

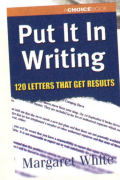
Do you want to make a complaint? *Put It In Writing* contains 120 well-considered, cool and authoritative letters, written by a lawyer and designed to get the response you want. You can easily adapt each one to suit your problem. The letters are backed up with practical advice about your rights, a list of useful contacts and a glossary of terms.

\$17.00 Code: PIW2

2001 Jukurrpa Diary

Practically designed with a page per day for weekdays and half a page each at weekends, this wire-bound diary features a variety of beautiful Aboriginal artwork as its monthly dividers. It includes an address section, year planner, school and public holidays and important dates in recent indigenous Australian history.

\$21.90 Code: 2001



Just for fun

Taylor & Beyond

Written by respected cricket writer Malcolm Knox, this fascinating read is the definitive account of the successes and controversies of Australian and international cricket in recent times. An ideal gift for the cricket enthusiast.

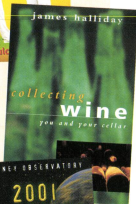
\$27.95 Code: TAYL



Collecting Wine

A comprehensive guide to collecting wine at home, written by one of Australia's foremost wine experts. It not only tells you how to set up your cellar but what to look for when you start collecting.

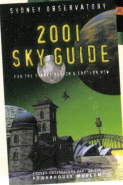
\$27.44 Code: COLW



2001 Sky Guide

(For the Sydney region and eastern NSW). This guide tells you when and where to find some of the year's most exciting celestial events. Useful for adults and budding astronomers of all ages, it makes both a perfect gift and a useful reference guide.

\$15.00 Code: 1SKY

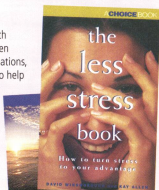


Relaxing this summer

The Less Stress Book

The Less Stress Book is a down-to-earth guide to coping with, surviving and even flourishing on stress. It includes explanations, case studies, checklists and exercises to help you manage stress. Written by psychologists, it offers relevant and sensible advice.

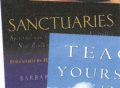
\$17.60 Code: LSB



Sanctuaries

Over 400 spiritual and health retreats are listed in this easy-to-use directory. Each entry gives details of the centre's spiritual focus, where it's located and what it has to offer groups and individuals. With a foreword from the Dalai Lama.

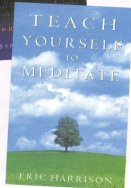
\$20.00 Code: SANC



Teach Yourself to Meditate

This is one of the easiest guides to meditation we've seen. It contains a range of meditation exercises, all of which can help you counter the stresses of everyday life.

\$21.80 Code: TYTM

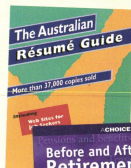


Thinking of your future

The Australian Résumé Guide

This popular guide to preparing a résumé has sold over 37,000 copies. It presents ways to prepare your résumé and write an effective job letter, and also includes a list of websites that can help job seekers.

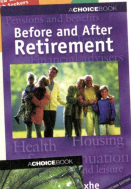
\$20.85 Code: TARG



Before and after Retirement

The revised and updated edition of this popular guide to retirement and retirement planning in Australia now includes information about lifetime health insurance, GST and the latest government benefits and bonuses. It also includes worksheets and checklists to help you plan more effectively.

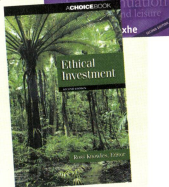
\$27.50 Code: BAR2



Ethical Investment

The second edition of this unique book provides a bounty of information to help you invest your money both wisely and ethically. Some of the issues it presents include looking at a company's ethics, details and ratings of ethical investments, and examples of how to invest in your own home (tax-free), and indirectly in the environment, by making it energy-efficient.

\$17.00 Code: ETI2



Around the home

How to Clean Practically Anything

Keep your home spick and span using the down-to-earth cleaning advice in this book. It contains two comprehensive stain removal charts (one specifically for carpets), a cleaning calendar, recipes for your own cleaning products and advice for cleaning everything from computer screens to bone-handled knives.

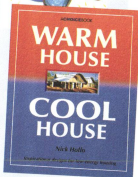
\$18.70 Code: HCPA



Warm House Cool House

Warm House Cool House explains how low-energy buildings work, giving examples of over 110 inspirational Australian homes designed to provide a comfortable living environment for our various climates as well as saving on power bills. Extensively illustrated with plans and photographs.

\$33.00 Code: WHCH



For your health

Understanding Back Trouble

Back problems affect more and more Australians every year. *Understanding Back Trouble* looks at the treatments available and explains what they are and how they work. It also explains how your back works, what can go wrong and how to prevent injuries.

\$19.80 Code: UBT

Traditional Chinese Medicine

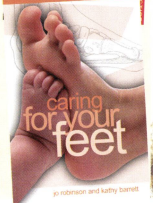
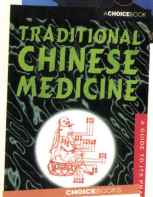
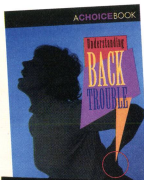
How does traditional Chinese medicine (TCM) work and what can you expect from it? This book explains the principles and practices behind traditional Chinese medicine. It includes details of herb, food and massage therapies as well as acupuncture, and a detailed description of what you should expect from a TCM consultation.

\$22.00 Code: TCM

Caring for your feet

In simple language and with lots of diagrams and pictures, this book explains how feet work and provides foot health information for everyone from children to grandparents. It will help the reader identify and perhaps avoid common problems — from tinea, bunions and sore heels to shin splints, blisters and knee pain. And there's extra help for people with arthritis or diabetes.

\$18.00 Code: FEET



Family

The CHOICE Guide to Baby Products

This popular guide gives unbiased advice about buying the products you need for a new baby. It includes information about a variety of products, including cots, disposable nappies, baby carriers, car restraints and even clothes dryers.

\$18.00 Code: CBP6

Friends

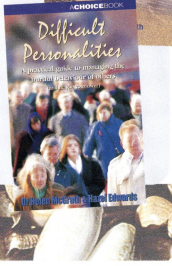
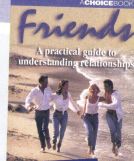
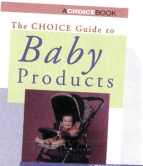
What can you do to nurture and develop your friendships? *Friends* can help by offering case studies, questionnaires and quizzes that you can use to evaluate your 'friendship potential'. It also provides strategies for building, nurturing and keeping your friends.

\$18.70 Code: FREN

Difficult Personalities

Difficult Personalities is a reassuring and approachable guide to help us deal with the difficult personalities we encounter each day — as well as our own. It offers strategies such as anger and conflict management, empathy, optimism, assertion, and how to make decisions about difficult relationships.

\$20.00 Code: DPFR



Order Form

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Shopping
for a

COMPACT CAMERA

Mystified by camera talk? Bemused by APS? Read on for a quick route to point and shoot.

YOU DON'T HAVE TO SPEND A LOT of money to get a reasonable compact camera — but there are some decisions you'll have to make. Knowing what's desirable and undesirable, along with the results from our test, will help you.

Zooming about

All the compact cameras in this test have a zoom lens, which means you can change the focal length to increase or decrease the magnification of a scene. Different focal length ranges are useful for different things, so you'll need to decide what you'll mainly be using the camera for. If you're likely to take lots of indoor photos, a wide-angle lens (low focal length) will be useful. For outdoors, where you're a long way from the subject, you'll need a telephoto lens (higher focal length). For more on wide angle and telephoto, see *Focal length* in *What does it all mean?*, page 34, and the table on page 39 listing the focal length range of all the cameras listed.

The widest-angle lenses in this test are 28 mm on the 35 mm MINOLTA Riva Zoom 75W and NIKON Lite Touch Zoom 70W AF; 21 mm for the APS KONICA Revio Z3 and KYOCERA Socus. These

lenses are roughly equivalent in their viewing angle and would be useful indoors.

At the telephoto end, the MINOLTA Riva Zoom 150 has a 150 mm lens, with the PENTAX Espio 145M Super not far behind at 145 mm. The NIKON Nuvis 300 has the longest lens for an APS camera at only 80 mm. This is equivalent to a 65 mm lens on a 35 mm camera — not really designed for birdwatching.

In your pocket

Most APS cameras are smaller and lighter than their 35 mm cousins. Sizes and weights listed in the table will help if this is a deciding factor for you.

However, as cameras get smaller and lighter they can be harder to hold still, and buttons and other controls might be difficult to use — particularly if you have big hands. Spend some time holding the camera and using all the major controls before you part with your cash.

Wet-n-wild

We dropped each of the cameras half a metre 10 times onto a wooden surface to see how well they'd cope with rough treatment. Remarkably, they all passed.

IN BRIEF

- *APS in a nutshell*, page 36, explores the differences between the advanced photo system (APS) and conventional 35 mm film.
- *APS or 35 mm?*, page 35, lists of some good and bad points of each system. Use the tick boxes to help decide which one's for you.
- *What does it all mean?* on page 34 helps with some tricky camera jargon.
- The table, pages 38–39, gives test results for 33 compact cameras: fourteen APS and nineteen 35 mm models, while our *What to buy* list (overleaf) suggests four standout models.



With APS you'll never have to handle negatives again — they're safely contained inside the cartridge. Instead, the lab will provide you with an index print showing miniature versions of all the photos on your film.

future (see *Counting the APS cost*, page 36).

So if you need to use a particularly slow film for fine detail, or a very fast film for low light conditions, a 35 mm camera at present gives you a lot more choice of film speeds. The exceptions are the NIKON Lite Touch Zoom 70W AF, MINOLTA Riva Zoom 70 and FUJIFILM DL-270 Zoom Super, which are all 35 mm models limited to film speeds between ISO 100 and 400.

Flash

The flashes may look pretty sparkling on the edges of Sydney harbour during fireworks displays, but they aren't doing much else. All the cameras in this test come with a built-in flash, but even the OLYMPUS Super Zoom 140S — the most powerful in this test — isn't going to be much use if your subject is more than nine metres away. The KYOCERA Socius could only manage a little over three metres (both cameras using ISO 200 film).

Flash can be quite useful in daylight as well. If there are strong shadows across your subject, or if you're taking a picture where the light behind the subject is brighter than on the subject itself, a **fill-in flash** can help to make the scene look more natural. On some cameras it's automatic, on others you need to turn it on. See the table for details.

WHAT TO BUY

APS

FUJIFILM Nexia 220ix Z	BEST BUY	\$179
KODAK Advantix C700		\$379

35 mm

MINOLTA Riva Zoom 75W		\$329
FUJIFILM DL-270 Zoom Super	BEST BUY	\$179

The KODAK Advantix C700 has a good range of features, which may be one reason why it's a lot more expensive than the FUJIFILM Nexia 220ix Z. It's equal second among APS cameras for picture quality (the FUJIFILM was top), and has excellent red-eye reduction.

If price is your major consideration when buying a 35 mm camera, the FUJIFILM DL-270 Zoom Super is a reasonable compromise, with excellent red-eye reduction and an acceptable zoom range, though it's limited to ISO 100 to 400 film speeds and doesn't have a self-timer for taking photos after a set delay.

Only the OLYMPUS μ (mju)II Zoom 80 claimed to be splashproof and it passed our shower test. None of the other models promise any protection from water.

Film speed range

Many APS cameras can deal with film speeds above ISO 400 or below ISO 100, but APS film is currently only available in Australia in ISO 100, 200 and 400. A camera with a wider range of film speeds may be useful in the

What does it all mean?

■ **Autofocus:** The camera chooses where to set the focus. There are two basic types.

One uses either an invisible infrared light beam or pulses of sound at a frequency too high to hear, sent out from the camera to locate the subject. These systems are quite efficient in low-light situations. However, they can be fooled by transparent barriers like a pane of glass, which can reflect the light beam or sound wave, causing the camera to focus in the wrong place.

The other type compares areas of contrast in a specific part of the subject. This area is usually marked in the viewfinder, so you can point the camera at the part of the scene where you want to focus. Unfortunately, this means that the autofocus may not work in low-light or low-contrast situations.

■ **Autofocus interlock:** Often compact cameras have a lock that prevents you taking a photo if the camera can't focus.

■ **Autofocus lock:** Allows you to select a subject and lock the focus on it.

■ **Exposure:** The camera's light meter balances the film's sensitivity to light with the length of time the shutter is open and the size of the lens aperture. Some cameras allow you to set the exposure manually.

Slight overexposure of print film can increase density and colour; however, the same amount of overexposure on slide film will produce a washed-out effect.

■ **Fill-in flash:** This is a handy feature when the subject is in front of a bright background. The camera compensates for the backlight by balancing the amount of light the flash produces with the exposure necessary for the background to make the subject appear natural.

■ **Flash interlock:** Stops the camera taking a picture if the flash isn't ready to fire.

■ **Focal length:** Most lenses are described in millimetres (eg 50 mm). The higher this number, the greater the magnification of the subject.

For 35 mm cameras, a focal length of 50 mm most closely represents what the human eye sees (40 mm for APS cameras; see below). Anything smaller than this is called **wide angle**: the smaller the number, the wider the angle of view and the more of the subject you can fit into your picture.

Higher focal lengths narrow the angle of view and make distant subjects appear closer (**telephoto**). A **zoom lens** allows you to vary the focal length to increase or decrease the magnification of a scene, and gives you much more versatility in fitting a subject into your photo.

Extreme focal lengths (both high and low) tend to increase the distortion of a photo: the lens makes straight lines appear curved, particularly towards the edges of the picture.

Because the size of an APS film is smaller than 35 mm, the size of a subject at the same focal length is also different. To compare the focal lengths of the two systems, divide the APS focal length by 0.8 (for example, 24 mm in APS would be 30 mm in a 35 mm conventional camera).

■ **Vignetting:** Where the edges of your picture are darker than the centre. This is a fault often associated with wide-angle, or sometimes very cheap standard, lenses.

Features all the cameras have

- Autofocus (see left).
- Half-press shutter release button to lock focus.
- Pre-programmed automatic exposure control.
- Built-in flash that operates automatically if the light conditions require it. This auto-flash can be turned off on all these models, for situations where you want mood lighting.
- Red-eye reduction.
- Flash interlock (see left), except the **KODAK Advantix F600**.
- Autofocus aiming point in the viewfinder so you know where the camera is focusing.
- Indication of correctly loaded film (all 35 mm models; with APS models you simply drop the film into the camera and close the flap).
- LCD screen showing essential exposure information, and LCD frame counter.
- Lithium battery, except the **KYOCERA Yashica Zoomate 70**, which uses alkalines.
- Battery check.
- Lens protection.
- Self-timer for taking pictures after a set delay, except the **FUJIFILM DL-270 Zoom Super**.
- Tripod socket.



REDUCING RED-EYE

If the flash is located close to the lens (as most built-in flashes are), people being flash-photographed may end up with red eyes in the photo.

Starting from the top (no reduction), these three examples illustrate how red-eye reduction can help improve your photos.



APS or 35 mm compact?

APS and 35 mm compact cameras are generally small and convenient. If you're looking for topline image quality above convenience, a 35 mm SLR (single lens reflex) camera will probably be more your style. However, they're bulkier, harder to use and generally more expensive.

APS and 35 mm compacts both have advantages and disadvantages. Use the following list to help you decide which type of compact camera's for you. Just tick the box next to the 'desirable' and 'undesirable' aspects you think are really important and you'll quickly see where your preferences lie.

APS

Desirable

- ☐ Selectable formats: C, which is similar to 35 mm format, H for wider shots and P for landscapes (see *APS in a nutshell*, page 36, for more detail).
- ☐ Time and date marking on the back of prints.
- ☐ Drop-in film loading.
- ☐ Index prints, so you can see a small version of your shot and decide whether to get it printed.
- ☐ Generally smaller and lighter than 35 mm cameras.

Undesirable

- ☐ As the scores in this test show, image quality is generally slightly lower than with 35 mm cameras.
- ☐ In general, viewfinders aren't as accurate as 35 mm (possibly due to the variable formats).
- ☐ Tendency to overexpose, making them unsuitable for use with slide film.
- ☐ APS film is currently only available in ISO 100, 200 and 400 in Australia.

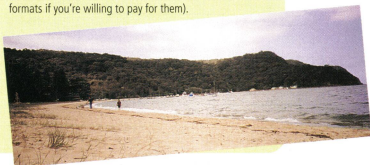
35 MM

Desirable

- ☐ A wide range of film speeds is available in Australia.
- ☐ Generally slightly better image quality.
- ☐ Suitable for colour and black and white, print and slide film.

Undesirable

- ☐ Generally heavier and bulkier than APS cameras.
- ☐ None of the special APS features, such as variable formats (though you can get prints done in different formats if you're willing to pay for them).

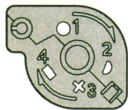


CHRIS RUGGLES

APS in a nutshell

The advanced photo system (APS) uses a different type of film that isn't compatible with conventional 35 mm cameras. So you'll have to buy an APS camera if you want its advantages, such as:

- APS film is smaller than 35 mm cartridges, allowing for a correspondingly smaller cameras.
- The film is completely enclosed within the cartridge, so you never have to handle it. To load the film you simply drop the cartridge into the camera and close the flap — the camera takes care of the rest.



○ Unexposed film

⊗ Fully exposed but not processed

◐ Partially exposed film

◻ Processed film inside cartridge

APS cartridges have a film status indicator — handy if you haven't used it for a while.



The three APS formats: P (top), H (centre) and C.

■ A switch on the camera allows you to select one of three picture formats:

C (classic) format, with the print size ratio of 2:3 height:width that you're used to from 35 mm photography.

H (HDTV) or 'group' format, with a ratio of 9:16 — the same as a wide-screen TV.

P (panoramic) format, with a print ratio of 1:3. The P format negative is in fact the same width as the H format, with the top and bottom cut off. The prints are then enlarged.

You'll see the chosen format in the viewfinder and the camera stores your selection on the film, where it can be read by the processing equipment. However, as the camera always exposes the whole frame (which is in the H format), you can order reprints of whichever format you want — no matter what you selected when taking the photo.

■ After the negatives have been processed, they're stored inside the cartridge again. You'll get an index print that shows miniature versions of all the images on your film (see photo, page 34).

The film cartridge carries an identification number that's also on the index print and on the back of each of the prints. So identifying a photo you want to reprint is easy.

■ The film has a magnetic coating where the camera can store certain information. This in turn can be read by the processing equipment and is called 'information exchange' or 'ix', which you'll see in the name of some of the cameras. (Don't put this film near a strong magnetic field like a loudspeaker if you want to keep this information.)

Counting the APS cost

■ APS colour film is currently available in Australia as ISO 100, 200 and 400 with 15, 25 and 40 exposures. Kodak has an ISO 400 black-and-white film and Fujifilm says it will have an ISO 800 colour film available early in 2001. For a 25-exposure film, expect to pay \$6 to \$10 for ISO 200 film, or \$7.25 to \$11 for ISO 400.

■ If you want overnight or one-hour processing, you have to find a minilab that can process APS film onsite. Currently, only about 18% of minilabs in Australia can.

Most pharmacies and other agents for wholesale processing accept APS film, but send it to a central lab, so you may have to wait several days for your prints.

■ You may pay different prices for each print size on a print-by-print basis — typically \$6 for the processing and index print, 50 cents for C-size, 55 cents for H-size and 75 cents for P-size. However, other labs have flat-rate prices per film (\$13.75 to \$16.95 for 25 exposures, including index print), which may be worth shopping around for — especially if you want a lot of panoramic prints.

Expect to pay more than twice the above amounts when ordering reprints.

PROFILES

The models in the *What to buy* list are profiled in rank order from left to right, within types. Prices shown are a good target to aim for when shopping around, based on nationwide checks in October 2000. Anything lower is a bargain.

APS

FUJIFILM NEXIA 220ix Z

Target price: \$179

GOOD POINTS

- Best APS for picture quality.
- Effective red-eye reduction.
- Subject-in-focus indicator in viewfinder.

BAD POINTS

- Tends to overexpose — not suitable for slide film.
- No continuous shooting (where the camera keeps taking pictures as long as the shutter button is depressed).
- No mid-roll change (with some APS cameras you can remove and then replace partially exposed films, which can be handy if you want to switch between different film speeds).
- Viewfinder information: no slow-exposure/camera-shake; no subject out of range/unable to focus; no flash will operate indicator.
- You can't manually override the automatic exposure.
- No dioptic eyepiece (which may help if you normally wear glasses).
- No close-up/macro mode.
- No focus interlock (which stops you taking a photo if the camera can't focus).
- No fill-in flash.



**BEST
BUY**

KODAK ADVANTIX C700

Price: \$379

GOOD POINTS

- Equal second best APS for picture quality.
- Complete red-eye reduction.
- Comments can be printed on the film.
- Flip-up flash to help reduce the chance of obscuring it when taking a photo.
- Fill-in flash (manual).
- Focus interlock.
- Viewfinder information: flash will operate; subject out of range/unable to focus.
- Mid-roll change.

BAD POINTS

- No continuous shooting.
- Tends to overexpose — not suitable for slide film.
- Viewfinder information: no slow exposure/camera shake, no subject in focus.
- No dioptic eyepiece.
- No close-up/macro mode.
- You can't manually override the automatic exposure.



35 mm

MINOLTA RIVA ZOOM 75W

Price: \$329

GOOD POINTS

- Best in the test for picture quality.
- Second best 35 mm for ease of use.
- Date marking.
- Flip-up flash.
- Fill-in flash (manual).
- Close-up/macro mode.
- Focus interlock.
- Viewfinder information: subject in focus, flash will operate, slow exposure/camera shake, subject out of range/unable to focus.
- Continuous shooting: 0.7 frames/second (the camera keeps taking pictures as long as the shutter button is depressed).
- Complete red-eye reduction.

BAD POINTS

- No dioptic eyepiece.
- You can't manually override the automatic exposure.



FUJIFILM DL-270 ZOOM SUPER

Price: \$179

GOOD POINTS

- Fill-in flash (manual).
- Infrared remote control.
- Viewfinder information: flash will operate.
- Continuous shooting: 0.7 frames/second (the camera keeps taking pictures while the shutter button is depressed).
- Complete red-eye reduction.

BAD POINTS

- Viewfinder information: no slow exposure/camera shake; no subject out of range/unable to focus; no subject in focus.
- No dioptic eyepiece.
- No close-up/macro mode.
- No focus interlock.
- You can't manually override the automatic exposure.
- No date marking.



**BEST
BUY**

What about the rest?

APS

■ The MINOLTA Vectis 260, NIKON Nuvis 300, CANON Elph II and Elph LT260, OLYMPUS i Zoom 2000 and FUJIFILM Nexia 3100ix weren't far behind the two APS models in the *What to buy* list, and you'd probably be pretty happy with them, especially if you found them at the right price.

■ The remaining APS models (see the table, page 39) didn't rate as well as the others for picture quality.

35 MM

■ The NIKON Lite Touch Zoom 70W AF and Lite Touch Zoom 120ED AF, PENTAX Espio 105G, MINOLTA Riva Zoom 150, CANON SureShot Zoom 85N and SureShot Classic 120, KYOCERA Yashica Zoomate 115 and SAMSUNG Fino 1050XL all had reasonable picture quality and you'd probably be quite happy with them, especially if you found them at a good price.

■ The remaining 35 mm models (see the table) weren't as good for picture quality.

COMPACT CAMERAS

1

Brand / model
(in rank order within groups)

APS

FUJIFILM Nexia 220ix Z



KODAK Advantix C700

MINOLTA Vectis 260

NIKON Nuvis 300

CANON Elph II

CANON Elph LT260

OLYMPUS I Zoom 2000

FUJIFILM Nexia 3100ix

KODAK Advantix F600

KONICA Revio Z2

KONICA Revio Z3

PENTAX Efina T

SAMSUNG Rocus 210i

KYOCERA Socius

35 mm

MINOLTA Riva Zoom 75W

NIKON Lite Touch Zoom 70W AF

PENTAX Espio 105G

NIKON Lite Touch Zoom 120ED AF

MINOLTA Riva Zoom 150

CANON Sureshot Zoom 85N

CANON Sureshot Classic 120

FUJIFILM DL-270 Zoom Super



KYOCERA Yashica Zoomate 115

SAMSUNG Fino 1050XL

PENTAX Espio 145M Super

OLYMPUS μ(mju)II Zoom 80

OLYMPUS Super Zoom 140S

SAMSUNG Fino 700XL

KONICA Z-Up 110 VP

KYOCERA Yashica Zoomate 70

RICOH RZ-115

MINOLTA Riva Zoom 70

SAMSUNG Fino 140S

Manufacturer/ distributor	Origin	Target price (\$)*	Warranty (years)	Weight (g)	Dimensions (L x H x D; mm)	Flash range (m)
Hanimex	Indonesia	179	2	193	121 x 65 x 41	0.9(W&T) to 5.0(W); 2.5(T)
Kodak	Indonesia	379	1	261	122 x 67 x 45	0.8(W&T) to 5.5(W); 4.6(T)
Hagemeyer	Malaysia	315	2	188	104 x 66 x 42	0.5(W&T) to 6.2(W); 2.5(T)
Maxwell Optical	Korea	375	1	177	99 x 60 x 37	0.7(W); 0.75(T) to 6.0(W); 2.2(T)
Canon	Japan	479	1	188	88 x 58 x 26	0.45(W&T) to 4.2(W); 3.1(T)
Canon	Taiwan	305	1	174	94 x 63 x 30	0.45(W&T) to 5.8(W); 3.6(T)
R Gunz	China	339	2	148	90 x 61 x 34	0.6(W&T) to 3.4(W); 1.8(T)
Hanimex	Indonesia	415	2	202	100 x 62 x 36	0.6(W&T) to 4.5(W); 2.7(T)
Kodak	China	229	1	234	118 x 63 x 39	0.6(W&T) to 7.7(W); 4.1(T)
Konica	China	320	2	168	95 x 57 x 28	0.5(W); 0.4(T) to 5.9(W); 3.1(T)
Konica	China	425	2	191	100 x 61 x 32	0.8(W); 0.6(T) to 4.8(W); 2.4(T)
CR Kennedy	Philippines	499	1	218	95 x 60 x 31	0.65(W&T) to 3.5(W); 2.0(T)
Samsung	Korea	259	2	173	100 x 60 x 31	1.4(W); 1.7(T) to 4.0(W); 2.1(T)
Tasco	China	459	2	141	103 x 52 x 28	0.35(W); 0.5(T) to 3.1(W); 2.1(T)
Hagemeyer	China	329	2	283	121 x 67 x 44	0.4(W&T) to 8.4(W); 3.3(T)
Maxwell Optical	China	239	1	239	117 x 64 x 42	0.9(W); 1.2(T) to 4.7(W); 2.7(T)
CR Kennedy	China	259	1	298	118 x 70 x 56	0.65(W&T) to 5.8(W); 2.4(T)
Maxwell Optical	China	340	1	243	115 x 61 x 46	0.75(W); 0.8(T) to 5.8(W); 2.8(T)
Hagemeyer	China	560	2	225	112 x 60 x 44	0.6(W); 0.85(T) to 6.5(W); 2.8(T)
Canon	China	237	1	268	123 x 64 x 46	0.6(W&T) to 7.5(W); 3.5(T)
Canon	Taiwan	439	1	301	115 x 63 x 45	0.6(W&T) to 5.8(W); 3.4(T)
Hanimex	China	179	2	263	116 x 66 x 49	0.8(W); 1.0(T) to 3.5(W); 1.8(T)
Tasco	China	309	2	229	111 x 62 x 43	0.8(W & T) to 5.8(W); 2.7(T)
Samsung	China	270	2	231	113 x 64 x 45	0.8(W); 1.0(T) to 4.5(W); 2.0(T)
CR Kennedy	Philippines	489	1	285	113 x 66 x 50	0.8(W); 1.08(T) to 5.4(W); 2.5(T)
R Gunz	China	359	2	222	115 x 62 x 47	0.6(W&T) to 6.2(W); 3.1(T)
R Gunz	Hong Kong	428	2	288	120 x 65 x 48	0.6(W); 0.9(T) to 9.1(W); 3.3(T)
Samsung	Korea	185	2	214	112 x 65 x 38	1.3(W); 1.6(T) to 5.5(W); 3.1(T)
Konica	China	319	2	297	121 x 70 x 54	0.8(W&T) to 7.9(W); 2.7(T)
Tasco	China	159	2	315	128 x 73 x 46	1.1(W&T) to 5.7(W); 2.8(T)
Ricoh	Malaysia	269	2	229	120 x 71 x 56	0.8(W&T) to 6.1(W); 2.3(T)
Hagemeyer	China	165	2	287	128 x 73 x 51	1.3(W); 1.7(T) to 4.3(W); 2.8(T)
Samsung	Korea	379	2	264	115 x 68 x 48	0.84(W); 0.98(T) to 5.74(W); 3.2(T)

* Prices shown are a good target to aim for when shopping around, based on nationwide checks in October 2000.

1 Flash range

This is the distance in metres for the flash to work effectively: too close and the subject will be too brightly lit, too far and there won't be enough light to expose the film correctly. Zoom lenses affect the flash range because they change the effective maximum aperture, which varies the amount of light reaching the film. (W) = widest angle; (T) = maximum telephoto.

2 Focal length (mm)

See *What does it all mean?*, page 34, for an explanation of the numbers.

3 Film speed range

The higher the ISO number, the more light-sensitive the film, allowing you to photograph fast-moving objects or in poor light.

Note: Most APS models can adapt to a range of film speeds, though currently there's only ISO 100, 200 and 400 film available in Australia for APS cameras.

4 Date marking

A tick indicates the camera records the date the photo was taken on the back of the print. Some APS cameras can also add a preset comment, which is indicated by 'C'.

5 Red-eye reduction

A number of systems deal with red-eye — the flash flips up and away from the lens (A), single pre-flash (SP), multiple pre-flashes (MP), a light beam

	3	4	5	6	7	8	
h (mm)	Film speed range (ISO)	Date marking	Fill-in flash	Red-eye reduction	Picture quality score (%)	Ease of use score (%)	Overall score (%)
45	100-400	✓	No	LB	74	63	71
0	50-1600	✓ + C	Manual	A	73	65	70
5	25-3200	✓ + C	Manual	FLB	73	64	70
0	50-3200	✓ + C	Manual	LB	70	70	70
6	25-10,000	✓ + C	Auto	LB	71	63	69
2	25-10,000	✓ + C	Manual	LB	72	62	69
0	25-3200	✓	Manual	MP	71	63	69
0	25-3200	✓	Auto	MP	69	65	67
0	50-1600	✓	Manual	LB	63	62	63
8	25-3200	✓	Manual	LB	65	60	63
8	25-3200	✓	Manual	LB	62	65	63
9	25-10,000	✓ + C	Auto	SP	56	73	61
6	50-1600	✓	Not tested	LB	57	62	58
2	50-3200	✓	Auto	SP	53	61	56
5	25-3200	✓	Manual	SP	84	71	80
0	100-400	✓	Manual	LB	79	67	75
05	25-3200	✓	Auto	LB	77	70	75
20	50-3200	✓	Auto	LB	78	64	74
150	25-3200	✓	Auto	MP	75	67	73
5	25-3200	✓	Manual	LB	76	64	72
20	25-3200	✓	Auto	LB	73	64	70
0	100-400		Manual	LB	73	61	69
15	100-800	✓	Manual	SP	74	57	69
05	50-3200	✓	Manual	LB	75	56	69
45	25-3200	✓	Auto	SP	65	72	67
80	50-3200	✓	Auto	MP	63	66	64
40	50-3200	✓	Auto	MP	63	61	63
0	50-1600	✓	Manual	LB	66	57	63
10	25-3200	✓	Manual	LB	62	59	61
0	100-800	✓	Manual	LB	61	56	60
15	100-3200	✓	Manual	LB	59	59	59
0	100-400		Manual	LB	59	56	58
140	50-3200	✓	Manual	LB	59	58	58
							Brand/model (in rank order within groups)
							APS
							FUJIFILM Nexia 220ix Z 
							KODAK Advantix C700
							MINOLTA Vectis 260
							NIKON Nuvis 300
							CANON Elph II
							CANON Elph LT260
							OLYMPUS I Zoom 2000
							FUJIFILM Nexia 3100ix
							KODAK Advantix F600
							KONICA Revio Z2
							KONICA Revio Z3
							PENTAX Efina T
							SAMSUNG Rocus 210i
							KYOCERA Socius
							35 mm
							MINOLTA Riva Zoom 75W
							NIKON Lite Touch Zoom 70W AF
							PENTAX Espio 105G
							NIKON Lite Touch Zoom 120ED AF
							MINOLTA Riva Zoom 150
							CANON Sureshot Zoom 85N
							CANON Sureshot Classic 120
							FUJIFILM DL-270 Zoom Super 
							KYOCERA Yashica Zoomate 115
							SAMSUNG Fino 1050XL
							PENTAX Espio 145M Super
							OLYMPUS μ(mju)II Zoom 80
							OLYMPUS Super Zoom 1405
							SAMSUNG Fino 700XL
							KONICA Z-Up 110 VP
							KYOCERA Yashica Zoomate 70
							RICOH RZ-115
							MINOLTA Riva Zoom 70
							SAMSUNG Fino 1405

(LB) or a flashing light beam (FLB). All seemed to work to some extent. The longer the bar in the column, the more effective the red-eye reduction was.

6 Picture quality score

For picture quality we assessed the following:

- Optical quality (for example, picture sharpness and focusing): 55%.
- Flash performance: 20%.
- Viewfinder accuracy (what you see through the viewfinder is what you'll get in the photo): 10%.
- Disturbing effects (vignetting, flare, distortion and shutter delay): 15%.

7 Ease of use score

Our panel assessed the ease of use for the following:

- Overall feel — bulk, weight, balance and ease of carrying: 10%.

- Preparation — loading film and batteries, and setting time and date: 10%.
- Taking pictures — controls, warnings, gripping the camera without obstructing the flash, clarity of LCD screen and markings on the camera body, default settings, type of zoom and ease of framing a shot: 50%.

- Viewfinder: 15%.
- Film rewinding: 5%.
- Instructions: 10%.

8 Overall score

Picture quality and ease of use were weighted as follows:

- Picture quality: 70%.
- Ease of use: 30%.



Freedom from information?

Governments and their agencies hold a wealth of information, from scientific secrets and military budgets to your personal health and taxation records. What access rights do you have?

IN BRIEF

■ FOI is generally working well for people seeking information about themselves. But it's another story for journalists and other organisations looking for politically sensitive information. For example, in NSW the Ombudsman's 1998–99 annual report said, "Agencies rarely disclose sensitive, contentious or political information." It also noted claims of political interference and complained that agencies are regularly failing to submit FOI reports as required by the legislation.

UNDER FREEDOM OF INFORMATION (FOI) laws, you have the right to request information and challenge a bureaucratic 'no'. You can use FOI, for example, to find out about a planning decision or check and correct your health records.

Some information isn't publicly available for justifiable security reasons. But information's also withheld for less admirable reasons: political mismanagement or dishonesty. Or maybe the government agency feels it 'owns' the information and has no reason to hand it over.

FOI covers Commonwealth and state government agencies, as well as those in the ACT. But you don't have access to information held by NT bodies, as there's no FOI act for the NT. You also can't use FOI to get information from private bodies (unless they've been specifically included, which is rare).

As well as giving people access to information about themselves, FOI aims to encourage open and accountable government, improving political debate. But the doors haven't been thrown wide open:

■ If the agency doesn't want to play ball you'll face a fight. You can have its decision reviewed,

but this can be a long — and costly — process.

■ Wide-ranging exceptions can be exploited by government agencies. Normally reasonable grounds — it'll affect national security or someone's privacy, for example — could be unfairly used to refuse a request, or you could be knocked back simply because it would create too much extra work for the agency. Some agencies, such as the Australian Secret Intelligence Service, are exempt altogether.

■ As governments contract out more services to private companies, the ocean of information held by government agencies, and therefore accessible under the legislation, is rapidly shrinking.

■ The best FOI law in the world won't work if it's implemented by recalcitrant agencies. According to the Australian Law Reform Commission's 1995 review of FOI: "More must be done to dismantle the culture of secrecy that still pervades some aspects of Australian public-sector administration."

Health records

You might imagine you've a right to see your medical records, no matter who holds them, but you don't. If they're held by a public hospital, you can use FOI to ask for access and have corrections made. But private health providers aren't government agencies, so they aren't covered.

In the ACT, you've a special right to view your health records and ask for them to be amended, no matter who holds them.

How to do it

You want to get hold of your medical records, check your police record or find out how a local planning decision was made. Where do you start?

First, contact the agency holding the information: it may simply hand everything over without an FOI request. If that doesn't happen, make an official application: write a letter or use an official form if one's available. There should be an FOI officer (or someone authorised to deal with FOI) to help you. Your letter should:

■ Say it's a request under the relevant FOI act (Commonwealth or state).

■ Give as much detail as possible about the information you request.

■ Include a cheque for the agency's application fee or say why you think it should be waived.

■ Make it clear that, if some of the information's exempt, you still want anything that's available as soon as possible.

Once the agency has your request, it must make a decision within a specified time. If it refuses access, it must give you a detailed response explaining why and telling you about your review rights. □

Hifi VCRs

Good news: most of the models tested are pretty good and, with only a couple of exceptions, you'd probably be happy with any of them.

YOU BUY A HIFI VIDEO RECORDER for its sound quality, so it'll be a relief to know that all these models are very good. The SAMSUNG and TOSHIBA scored a little lower than the others, but unless you're a hifi buff, you probably wouldn't notice any difference.

The test included 12 widely available hifi VCRs costing up to \$500. We checked them for sound and picture quality, ease of use and standby energy consumption.

However, hifi or not, you may have to make some adjustments when digital broadcasting hits your area — if it hasn't already.

Digital difficulties

Though our test results suggest any of the profiled models will do, you also need to consider your TV's set-up — specifically, does it have AV (audio-video) input sockets? Because if it doesn't, you could run into some problems with digital broadcasting, which may have already begun in your area.

TVs with AV-input sockets

All the VCRs we tested have AV-output sockets that can be used to send the picture and sound signals to the AV-input sockets of the TV. So you connect the TV and VCR with the AV connectors (for the sound and picture signals) and the RF (radio frequency) connector (for the aerial/antenna signal).

■ Digital broadcasting won't affect your TV-VCR set-up.

TVs without AV-input sockets

Some older (or cheaper) TVs don't have AV-input sockets, and instead receive the VCR's sound and picture signals, along with the aerial/antenna signal, via the RF connector.

But simply linking the TV and VCR together isn't enough. Even though the VCR is sending out a

BEST BUYS

LG AC950W	BEST BUYS	\$329
ORION VLXL2		\$329

The top 10 VCRs in the test (see the table, page 46) all had good scores that were very close to each other, and you'd probably be happy with any of them, especially if you found them at a good price. Based on our nationwide price checks, the **LG** and **ORION** are the two models that normally have the cheapest purchase price and so are our Best Buys. **LG** has a reasonable reliability rating, with 79% not needing repair in our last reliability survey (the highest score for reliability was 86% — see page 44 for more), but we don't have reliability information for **ORION**. The **ORION** was also harder find in the shops than most of the other models when we were checking prices.

We've profiled all 10 of the top models so you can see which might have features you're looking for (for example, the **LG** doesn't have G-code programming).

The **HITACHI** and **TOSHIBA** were the only two disappointing models, being significantly harder to use than the others.

IN BRIEF

- The sound quality — important in a hifi VCR — was very good on all models, and there's very little difference between them for picture quality.
- Not all models have all features, so check before you buy that you're getting the ones you want (see *What to look for*, page 42).
- Some models use twice as much power on standby as others, and while the amounts we're talking about are pretty small, they add up when you multiply them across the whole country (see note 8, page 47).
- When digital TV comes to your area you could have problems with your TV, VCR or both. See *Digital difficulties*, left, for more on this.

HIFI VERSUS STEREO

In case you'd ever wondered:

hi-fi: *adj.* high fidelity — reproducing the full audio range of the original sounds with relatively little distortion.

stereo /

stereophonic: *adj.*

1. of or relating to a three-dimensional auditory perspective.

2. of or relating to the multi-channel reproduction or broadcasting of sound which simulates three-dimensional auditory perspective. Most commonly two channels are used and reproduction is from two speakers or speaker systems placed apart in front of the listener.

— *The Macquarie Dictionary*, 3rd edition, 1997.

If you don't have a stereo TV, you can still use the superior sound of your hifi VCR by hooking it up to your audio hifi system.

signal (the RF output) for the TV, the TV doesn't know where to find it. Until you tell it where, the TV can't recognise the sound and picture it receives from the VCR. Therefore you have to either:

■ **Tune the TV to the VCR** by tuning one of the TV's unused channels to the VCR's RF output; or

■ If you don't know how to tune the TV (because you've lost the instructions, say), you can **tune the VCR to the TV**. This can be done by adjusting the VCR's RF output to the frequency of an unused channel of the TV.

If this sounds like a bit of a hassle, the introduction of digital broadcasting means a whole new ballgame — and more hassles.

Problems resulting from digital broadcasting

Digital broadcasts will be using some of the frequencies currently used by the VCRs' RF output — for example, it's estimated that more than 50% of VCRs use UHF channel 37, one of the most

affected channels. The clashing frequencies will cause signal interference, giving you poor-quality picture and sound.

You can overcome this by using the AV sockets, if your TV has them, or adjusting the VCR's RF output to another channel that's not in use in your area — easier said than done with some models (see *Problem models*, far right). This may also prove difficult for the estimated three million people potentially affected in the Newcastle-Sydney-Illawarra region, where all allowed broadcast channels are in use somewhere, leaving no single channel free (although some channels *may* be able to be used in some areas).

Another problem is that you may have to retune your VCR's channel several times because not all services will start at the same time — so what works today may **not** work tomorrow. In the past you only had to do it **once** (when you first got the TV or VCR), if at all; often TVs have a preset VCR channel.

WHAT TO LOOK FOR

VCRs have a lot of features, some of them essential, some you'll probably never use, and perhaps some new ones you'll wonder how you ever lived without.

The basics

■ **One-touch recording (OTR).** For immediate recording you press the OTR key to start recording, and then set the duration by pressing it repeatedly — once for 30 minutes, for example, twice for an hour and so on. Both the preset increments and maximum recording times vary from model to model.

All the models tested have OTR. On the **SHARP** and **SONY** it can be activated with a **delayed start**, where both the start time and duration of the recording can be set by repeatedly pressing two designated keys.

■ **Timer recording.** To record a future program, you have to set the date, start and end time and channel. Most models also have a 'periodic' option that lets you set the timer to record your favourite daily or weekly program. On some models you can preset a month in advance, on others a year (not that you'd have that information, of course!). G-code is another way to timer record (see right).

On all models except the **HITACHI** and **PANASONIC** you can alter the settings later (after they're stored in the VCR's memory). This is useful if you want to adjust the settings when you discover a broadcast is running late, for example.

■ **Manual and auto tuning.** All the models tested have both auto and manual channel tuning. With auto tuning the VCR finds the channels and allocates numbers to them. With manual tuning you can find the best reception in your area,

and allocate whatever number you want (or, in some instances, names) to a particular channel.

Useful extras

■ **G-code recording.** Television programs have a G-code number that represents their channel number, start time, date and duration, and is published in TV guides. This is an easy and convenient function: you just press the G-code button on the remote and type in the G-code number. The **LG** and **TEAC** don't accept G-codes, so avoid these models if you're counting on using it.

The first time you use your new VCR for G-code recording, you have to tell it which channel you've tuned to the broadcast channel — for example, that TEN (in Sydney) was allocated to 10, or that 5 relates to 28 (SBS). On some models (the **SONY** in this test) you have to set all the channels initially when you first set up the VCR; on others (the **HITACHI**, **NEC**, **ORION**, **SAMSUNG** and **SHARP**) you have to enter the channel number the first time you key in a G-code that uses that channel; and on the **JVC**, **PANASONIC**, **PHILIPS** and **TOSHIBA** you can do it either way.

After you've keyed in the G-code, you'll see displayed onscreen the details of the program set to be recorded. On some models (the **HITACHI**, **JVC**, **PHILIPS** and **SONY**) you can amend the set recording duration (end time) to take late-running programs into account; others (the rest in our test) even let you amend other settings such as the start time, date or channel as well.

■ **Channel erase or skip** lets you bypass or remove unassigned, unwanted or less frequently used channels, so you



VANESSA MARSHALL

Your other options include replacing your TV, improving your antenna installation or installing a filter to knock out the source of interference — all costs to be borne by you for a service you probably can't even use.

CHOICE wants to see:

- A public information campaign explaining the likely problems people will encounter and how to overcome them. We're concerned that consumers may unnecessarily buy new equipment if they don't know why theirs has suddenly stopped working properly.
- Advice/call centres to help individuals deal with the problems they're facing.
- Any costs to be borne by industry or government, rather than the consumer. This might include technical assistance and new equipment necessary to deal with interference problems caused by digital broadcasting.

If you want to know more about digital broadcasting and the issues involved, see *Digital television... a case of what might have been*, in CHOICE, August 2000.

Problem models

If your TV doesn't have AV input sockets and you can't tune the TV for whatever reason, we suggest you don't buy the following VCRs, because there were problems adjusting the RF output:

- The NEC claims to have an adjustable RF output, but we couldn't make it work until NEC clarified the instructions — so chances are you won't either.
- The SAMSUNG and TEAC use the onscreen (TV) display to access the RF output adjustment function from the onscreen menu. The reason you'd want to adjust the RF output channel of the VCR in the first place is so that you can view the picture on your TV. But how can you view the onscreen menus if the VCR's RF output hasn't yet been adjusted to match the TV?

don't have to pass through all of them if you use the channel up and down keys. All the models tested have this feature.

- **Channel relocate** lets you change pre-assigned channels. Most models tested have this feature; the PANASONIC, SHARP and TOSHIBA don't.

- **Eject key on remote control.** Too lazy to get up and eject the tape after the movie's finished? On most VCRs we tested (all except the JVC and SAMSUNG) you can do so with the remote. The PANASONIC doesn't have a separate 'eject' button on the remote control, but if you hold down the stop button for three seconds, the tape will eject (this wasn't mentioned in the instructions).

You still have to get up eventually and put the tape back into its sleeve, but at least it won't stay wrapped around the heads.

- **Commercial skip.** Don't get your hopes up: there's still no VCR that can detect and completely zap commercials. However, this feature makes it easier for you to fast forward through them when you're watching a recorded program. You press a designated key once and the VCR skips a short section (around 30 to 180 seconds, depending on the model). The following models tested have this feature: JVC, LG, NEC, SHARP and TEAC.

The icing on the cake

- **SP, LP and automatic SP to LP.** Short, or standard, play (SP) is the normal speed of the video recorder. Long play (LP) records at half the normal speed — fitting more on the tape. All the VCRs tested have both. Some models can automatically switch to LP if they detect that there isn't enough tape left for your recording (see the table, page 46,

for which models). A slight drawback with LP is that it reduces the quality of the picture a little. The

PANASONIC has **extended play** (EP), which triples the capacity of the tape without compromising the picture quality beyond that of LP.

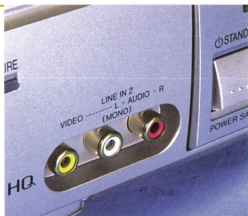
- **Slow playback.** Couldn't quite see which horse won the cup? With slow play you can run the recording at a speed slower than normal, but sound is muted in this mode.

■ **Frame-by-frame play** allows the picture to be advanced (and sometimes reversed) one frame at a time, and may be useful if you intend using your VCR for editing or copying, or if you really want to milk every ounce of victory from that winning horse race. All VCRs in this test have forward frame-by-frame play except the PANASONIC. The JVC, ORION, PHILIPS and SONY also do it in reverse.

- **Still play** freezes the picture on the screen. (This function is called 'pause' on some players.)

■ **NTSC** is the TV picture format used in the US — Australia uses PAL. With all the VCRs tested you can play videos from the US; some let you record from NTSC formats as well. The HITACHI, JVC, PANASONIC, PHILIPS, SAMSUNG, SHARP, SONY and TOSHIBA have the NTSC-record feature.

- **Child lock** will lock the front panel controls. You can only reactivate them with the remote control — so it helps to hide it from the kiddies in the meantime. The table shows which models have this feature.



Front AV (audio/video) inputs make it very easy to connect another VCR or video camera.

VANESSA MARSHALL

THIRTY-ONE DAYS A MONTH

Thirty days hath September, April, June, and November... so the rhyme goes, with February having 28 days clear, and 29 each leap year. But not according to the timer-recording calendars on some VCRs.

We found it was possible to set the **LG**, **NEC** and **TOSHIBA** timer recordings to February 29 in a non-leap year, and even February 30 and 31. The same applies for September, April, June and November 31. So if on, say, April 30 you program it to record something 'tomorrow' by zapping the recording date up one — to the 31st — bad luck. Ironically, the machine knows that tomorrow's date is actually May 1 so it won't record. Instead it'll record whatever's showing on May 31 — the next occurrence of 'the 31st', and well and truly after your TV show.

How reliable have subscribers found them?

We asked a group of subscribers about the reliability of their VCRs (hi-fi and mono). The graphs below show the results for the brands for which we got sufficient answers (the number in brackets tells you how many readers reported on the brand). Note that we don't have reliability data for all the brands on the market.

About 17% of respondents said their VCR had needed repair in the previous 12 months, making VCRs one of the most commonly repaired home appliances. The most common problem with machines that are three years old or less was dirty heads (12%). There's very little to choose between the brands for reliability.

Respondents reported significantly more problems than average for **AKAI** with dirty heads, the tape mechanism and the picture (**MITSUBISHI** and **SAMSUNG** also had significantly more picture problems).

LG/GOLDSTAR was reported as having significantly fewer problems than average with the tape mechanism, and **PANASONIC/NATIONAL** with the tape mechanism and picture.

Percentage not needing repair in the last 12 months

Panasonic/National (6836)	86
Philips (2014)	84
Sony (3024)	84
JVC (1603)	83
Mitsubishi (1576)	83
Samsung (1087)	83
Sharp (2637)	83
Teac (549)	83
Hitachi (380)	82
Sanyo (676)	82
Akai (3677)	79
LG/Goldstar (302)	79
NEC (1323)	79

Differences of more than 5% are meaningful.

Percentage who would buy the same brand again

Panasonic/National (6807)	94
Sony (3009)	94
Philips (2000)	87
Sharp (2611)	87
JVC (1590)	86
Sanyo (672)	86
LG/Goldstar (292)	85
Mitsubishi (1535)	85
Hitachi (366)	82
Akai (3643)	81
NEC (1309)	80
Samsung (1064)	79
Teac (547)	76

PROFILES



SHARP VC-H710X

Target price: \$369

Summary: Best overall performer — equal best for picture quality and equal best environmental score. The only letdowns were:

- Doesn't have channel relocate feature (see *What to look for*, page 42).
- AV connecting cables aren't supplied (you only get an RF connector), so you'll have to buy a set if you don't already have some.



PHILIPS VR899/75

Target price: \$389

Summary: A good all-round performer and easy to use, although its environmental score wasn't too good.

- It might be a particularly good choice for potential video editors or sports fans who want to use the frame-by-frame play feature — its dial-style control on the remote control makes it easy to control the playback speed.



SAMSUNG SV-630B

Target price: \$359

Summary: The best score for ease of use and good picture quality. However:

- The sound wasn't quite as good as most others, but unless you're a hifi buff you probably won't notice the difference.
- It may not be a good choice if your TV doesn't have AV inputs. The RF output adjustment function uses the onscreen display, but because you can't see the onscreen menu until the signal's been adjusted to match the TV, this feature is almost impossible to use (see *Digital difficulties*, page 41).

The top 10 models in the test are profiled in rank order from top to bottom, left to right. Prices shown are a good target to aim for when shopping around, based on nationwide checks in October/November 2000. Anything lower is a bargain.



SONY SLV-EZ77AS

Target price: \$499

Summary: Good all-round video recorder and equal best for sound quality. The only bad point is that AV connecting cables aren't supplied with it.



JVC HR-J777MS

Target price: \$379

Summary: A good all-round video recorder. The only bad point is that AV connecting cables aren't supplied with it.



LG AC950W

Target price: \$329

Summary: Equal best for sound and picture quality, and equal best environmental score. However, there were some problems with its ease of use:

- It accepts invalid date settings for programmed timer recordings (such as April 31 — see *31 days a month*, far left).
- It doesn't have G-code.



ORION VLXL2

Target price: \$329

Summary: A good all-round video recorder let down slightly by its relatively low environmental score.



NEC VH-108

Target price: \$385

Summary: Equal best for sound and picture quality. However, it accepts invalid date settings for programmed timer recordings (such as April 31 — see far left).



TEAC MV-6092

Target price: \$349

Summary: Good all-round video recorder and equal best for picture quality. However, its environmental score was equal lowest, and there were some ease of use problems:

- The front panel display is dim and lacks some indicators, such as the tape counter during playback and record modes.
- It may not be a good choice if your TV doesn't have AV inputs. The RF output adjustment function uses the onscreen display, but because you can't see the onscreen menu until the signal's been adjusted to match the TV, this feature is almost impossible to use.
- It doesn't have G-code.
- AV connecting cables aren't supplied.



PANASONIC NV-FJ600A

Target price: \$499

Summary: Good for picture and sound, but its environmental score was equal lowest and there were some problems with ease of use:

- It won't allow you to make changes to the programmed timer settings after you've entered them; to change something later, you have to delete the set program and start again with a new one.
- It doesn't have a channel relocate feature (see *What to look for*, page 43).

A USELESS GIMMICK?

Some video recorders offer a **repeat playback** feature: that is, the video plays over and over again until you stop it — or die of boredom, as some among us suggested. "What possible use could you have for such a feature?" they asked, rolling their eyes.

Well ... one of us (not mentioning any names) has a five-minute video tape of their overseas registry-office marriage. When the not-so-newlyweds have their wedding party for the Australian contingent, they intend to have the TV tucked away in a corner, playing the video over and over again for guests to wander over and watch when (or indeed if) they want to. Is that romantic or what? And there must be countless other such uses for it... keeping the cat amused all day with the 'fish in a fish tank' video, for example.

The **HITACHI**, **ORION**, **PANASONIC**, **SAMSUNG** and **SHARP** have this feature. The **JVC** will play a video up to 100 times over, and the **PHILIPS** up to 50 times — perhaps there are limits to anyone's tolerance.

BEST
BUY

BEST
BUY

HIFI VCRs

						1	2	3	4	5						
Brand / model (in rank order)						Manufacturer / distributor	Origin	Target price (\$)*	Warranty	Dimensions (H x W x D; mm)**	G-code	Automatic SP to LP	One-touch recording with delayed start	Front AV input sockets***	Tape with	
equal	SHARP VC-H710X						Sharp	Malaysia	369	1	95 x 430 x 260	✓	✓	✓	✓	✓
	PHILIPS VR899/75						Philips	Malaysia	389	1 (A)	95 x 360 x 290	✓	✓		✓	✓
	SAMSUNG SV-630B						Samsung	Indonesia	359	1	95 x 365 x 305	✓	✓		✓	
equal	SONY SLV-EZ77AS						Sony	Malaysia	499	1 (B)	100 x 430 x 310			✓	✓	✓
	JVC HR-J777MS						Hagemeyer	Malaysia	379	1	95 x 400 x 290	✓	✓		✓	
	LG AC950W						LG	Indonesia	329	1 (C)	95 x 360 x 285				✓	✓
	ORION VLXL2						Castel	Thailand	329	1	95 x 380 x 295	✓			✓	✓
	NEC VH-108						NEC	Indonesia	385	1	95 x 360 x 285	✓			✓	✓
equal	TEAC MV-6092						Teac	Korea	349	1 (D)	100 x 360 x 290		✓		✓	✓
	PANASONIC NV-FJ600A						Panasonic	Japan	499	1 (E)	90 x 430 x 305	✓	✓		✓	(F)
	HITACHI VT-FX768E						Hitachi	Malaysia	369	1	95 x 380 x 300	✓			✓	
	TOSHIBA V-W57H						Castel	Indonesia	429	1	95 x 360 x 300	✓	✓		✓	✓

* Prices shown are a good target to aim for when shopping around, based on nationwide checks in October/November 2000.

** Dimensions shown are rounded up to the next 5 mm.

*** Front AV inputs are independent of the rear inputs, so you can plug in an extra device.

(A) Extra two years \$150; extra three years \$170; extra four years \$205.

(B) Extra two years \$83.

(C) Three-year warranty for drum and heads.

(D) \$29 each extra year, up to nine years.

(E) Extra two years \$60; extra four years \$90.

(F) Neither described in the instructions nor labelled on the handpiece, but if you press and hold the stop key for around three seconds, the tape will eject.

For people with a disability

How easy are the remote and front panel controls to operate and the display to read if you have problems with vision or using your hands?

We assessed the video recorders for helpful features and potential difficulties, based on guidelines from the Independent Living Centre.

■ The **remote control** should be easy to grip, well balanced and comfortable to hold, with buttons that don't require much pressure to operate.

■ Once set up, it should allow you to scroll directly between tuned channels without having to enter the channel numbers individually.

■ Buttons should be large and well spaced. Those with related functions should be grouped — colour coding can help distinguish different functions.

■ Markings should be clear and contrast well with the background colour.

Of those in our *What to buy* list, the **SAMSUNG**'s remote control was considered best for people with a disability: the commonly used keys are large, easy to find and well-spaced.

If you prefer to use the front panel controls, the **SHARP** has widely spaced buttons that stand out well and are clearly marked, and the **TEAC** is also worth considering.

The onscreen display should indicate clearly what's happening when you use the remote control. Some people may find the Hitachi (pictured left), LG and NEC display difficult to read, while the Orion, far left, has clear onscreen instructions.



WARRISSA MARSHALL

WARRISSA MARSHALL

	7	8	8	9	10	11	12		
Rank	Rewind time (min:sec)	Annual standby energy cost (\$)	Environmental score (%)	Ease of use score (%)	Sound quality score (%)	Picture quality score (%)	Overall score (%)	Brand / model (in rank order)	
1	1:07	2.60	70	73	93	75	77	SHARP VC-H710X	
2	2:47	4.70	50	75	92	73	76	PHILIPS VR899/75	
3	1:04	3.90	60	77	86	73	76	SAMSUNG SV-630B	equal
4	2:51	3.40	60	72	95	73	76	SONY SLV-EZ77AS	
5	2:42	4.70	50	74	93	74	75	JVC HR-1777MS	
6	2:56	3.00	70	67	95	75	75	LG AC950W	equal
7	1:45	4.90	50	73	94	73	75	ORION VLXL2	
8	1:04	4.30	60	66	95	75	73	NEC VH-G-108	
9	2:06	5.90	40	68	93	75	72	TEAC MV-6092	
10	1:13	5.90	40	65	92	71	69	PANASONIC NV-FJ600A	
11	1:27	2.70	70	47	91	72	63	HITACHI VT-FX768E	equal
12	1:06	3.70	60	50	84	74	63	TOSHIBA V-W57H	

All the VCRs tested have four video heads and two sound heads. All passed basic electrical safety tests and complied with standard tuning requirements.

They also have the following features:

- Automatically switches on if tape is loaded when in standby mode.
- Automatic and manual tracking.
- Automatic and manual tuning.
- AV output sockets.
- Channel erase or skip.
- Counter can be reset to zero.
- Fast view forward and backward during play.
- Manual fine tuning.
- NTSC playback to a PAL TV.
- One-touch, simple and timer recording.
- Slow play and still play.
- SP and LP recording modes.

1-6 Features

See *What to look for*, page 42, for an explanation of these (and other) features.

7 Rewind time

This is the fastest time taken to rewind an entire three-hour tape.

8 Standby energy cost / environmental score

We measured the energy consumption in standby mode for all the models tested, and calculated the running costs for one year. This figure doesn't include the cost of using the VCR for playing or recording videos.

The higher the score, the lower the energy consumption in normal standby mode.

9 Ease of use score

Many people find VCRs quite complex to use. We assessed the following areas for ease of use:

- Front panel controls (10%).
- Remote control (30%).
- Front panel display (10%).
- Onscreen display (15%).
- Manual tuning (5%).
- Programming — with timer and G-code (if applicable) (30%).

10 Sound quality score

We checked VCRs for the following sound performance factors:

- Frequency response (25%).
- Harmonic distortion (25%).
- Wow and flutter (25%).
- Signal-to-noise ratio (25%).

We also listened to music and movie recordings from DVD and CD sources to check for any anomalies.

11 Picture quality score

We assessed the VCRs on:

- Short-play (SP) recordings from various sources (60%).
- SP recording played back in slow, still, fast view forward (cue) and fast view backwards (review) modes (20%).

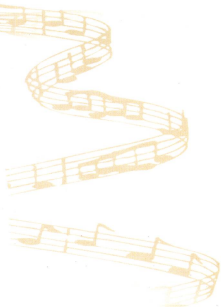
- Long-play (LP) recording played back in normal, slow, still, fast view forward (cue) and fast view backwards (review) modes (20%).

12 Overall score

The scores were weighted as follows:

- Environmental score: 10%.
- Ease of use score: 50%.
- Sound quality score: 20%.
- Picture quality score: 20%.

Ease of use is weighted highest because, for many people, it's this that limits the VCR's usefulness. In addition, all performed similarly for picture quality and all had very good sound quality.



If you find a recall or ban not on our list, please let us know. Companies often rent 1800 numbers for a couple of months after the recall is announced. If the number given is no longer operating, phone the manufacturer or retailer direct.

THE PRODUCT: Dorling Kindersley Australasia has recalled **Dorling Kindersley Bath Books**: 123; ABC; Bathtime; Colours; Playtime; Sea Animals; My First Number Bath Book; My First Word Bath Book; PB Bear — Row Row Row Our Boat; PB Bear — Rub a Dub Dub Bath Book. They were sold between 1998 and August 19, 2000.

The problem: If the bath books' outside covering is torn it exposes foam padding, which is a potential choking hazard.

What to do: Return the books to Dorling Kindersley Bath Books Recall, Penguin Books Australia, 487 Maroonah Highway, Ringwood 3134, for a full refund (including postage). For further information contact the Recall Co-ordinator on 1800 789 970.

THE PRODUCT: Honda Australia MPE has recalled **Honda motorcycles XR50R**, 2000–01 models.

The problem: The handlebar may become loose and, if not fixed, may come off.

What to do: Contact your local authorised Honda motorcycle dealer.

THE PRODUCT: Suzuki Australia has recalled **Suzuki motorcycles, model GSX1300R**, made in 1999–2000.

The problem: Cam timing may become maladjusted due to loss of timing chain tension, which may result in loss of control of the vehicle.

What to do: Contact your local authorised Suzuki dealer.

THE PRODUCT: Buderim Ginger has recalled **Ginger, lemon & lime marmalade**, sold in 450 g glass jars with a best-before date of 08 May 02, and barcode identification of EAN 931371190158.

The problem: There's a possibility of some containers containing glass fragments.

What to do: Return the marmalade to its place of purchase for a full refund or, for further enquiries, call 1800 067 686 8 am–5 pm Mon–Fri.

THE PRODUCT: Go-Lo has recalled all **Golden Boy teddy bears**

The problem: The toys' eyes can be easily removed, posing a choking hazard.

What to do: Don't give Golden Boy teddy bears to children. Return the teddy bears to a Go-Lo store for a full refund.

THE PRODUCT: Spotlight

Promotions has recalled **sunglasses** supplied to Carlton United Breweries for promotional purposes. They are grey-tinted wraparound sunglasses with the word COLD on the frame. They were sold at: CUB merchandising store 'Brewhouse', Yalata, Qld; and sold or given away at CUB promotions at these locations:

- Royal Queensland Show, August 10–19, 2000.

- Shooters Bar & Grill, Surfers Paradise, August 7 & 14, 2000.

- Reef Hotel and Casino, Cairns, July 30 and August 7 & 14, 2000.

- Society of Economics and Commerce Students, University of Queensland, July 22, 2000.

- Australian Board Riders Competition, Newcastle, July 3–7, 2000.

They were also given away to hotel staff in Toowoomba.

The problem: They fail to comply with the Australian Standard AS 1067-1190. Testing of the sunglasses by an accredited testing authority found they could cause blurred vision, misjudgment of depth, position or objects and should not be worn.

What to do: Return the sunglasses to: Reply paid, PO Box 1153, Fortitude Valley 4006, for either a full refund of the purchase price or a replacement pair of sunglasses.

THE PRODUCT: Bluebird Foods has recalled **Bluebird Incredibites** 150 g choc hazelnut, with a use-by date of 20.06.01.

The problem: Tests have detected microbial contamination.

What to do: Don't eat them. Return the product to its place of purchase for a full refund. Phone 1800 025 768 for more information, and if concerned about your health, visit your local doctor.

THE PRODUCT: Kawasaki Australia has recalled **Kawasaki motorcycles model KX65-A1**.

The problem: The frame down-tube may crack at the lower area of the head gusset, which could cause the rider to lose control of the motorcycle.

What to do: Contact your local authorised Kawasaki dealer.

THE PRODUCT: Kawasaki Australia has recalled **Kawasaki jet ski watercraft** models JH1200-A1 and JH1200-A2, manufactured from April 1999.

The problem: Pressure build-up in the fuel tank can expel gasoline or fumes from the vent hose into the engine compartment and cause a fire or explosion, possibly resulting in injury or death.

What to do: Don't use the watercraft. Contact your local authorised Kawasaki dealer.

THE PRODUCT: Agfa-Gevaert Australia has recalled **ePhoto CL30 AC adaptors** supplied as a digital camera accessory to Agfa ePhoto CL30.

The problem: The ePhoto AC adaptors may cause the batteries in the camera to overheat, leak acid and possibly explode.

What to do: Don't use your ePhoto AC adaptor with the Agfa ePhoto CL30 digital camera while batteries are installed in the camera. Return to the place of purchase or contact your local Agfa service organisation to have your AC adaptor replaced free of charge.

THE PRODUCT: Email has recalled **Westinghouse frost-free vertical freezers**, sold between November 1996 and September 2000, and identified by the following model and serial numbers. These numbers are printed on the model identification plate, which is located inside the freezer on the liner on the left-hand side near the front at mid height:

Model Serial no:

FJ303 00252603-03351412

64443156-95243332

FJ383 00251165-03054003

64244656-95241694

The problem: Defrost timers may fail, and, as a result, the freezers may release smoke or ignite. Frost-free freezers located in dusty and/or damp conditions are most at risk of the defrost timer failing.

What to do: Call 1800 001 218 between 8.30 am and 5.30 pm, Monday to Friday, to organise a service technician to replace the defrost timer at no cost.

Mobile phone users will be charged the cost of a local call. Have your model and serial number available when calling.

THE PRODUCT: Peugeot Concessionaires Australia has recalled **Peugeot 206 GTI** vehicles, built between June 1999 and March 2000, with VIN numbers from VF32CRFE4033996 to VF32CRFE40799741.

The problem: Side airbags may deploy inadvertently.

What to do: Contact your local authorised Peugeot dealer.

THE PRODUCT: Holden has recalled some **V8 Holden and HSV** vehicles — **V5 Series III and VT Series I**. Models affected are:

- V5 Utility and HSV Maloo (utes) — 5.0 L V8s — built from November 1998 to October 2000.

- V5 Statesman, Caprice and HSV Grange — 5.0 or 5.7 L V8s — built from November 1998 to June 1999.

- VT series 1 Commodore, Calais and HSV V8s, built from June 1997 to May 1999.

The problem: A fuel feed hose may have been fitted that doesn't fully meet specifications. The hose has the potential to thermally degrade and result in a fuel leak that could contact ignition circuitry, possibly causing blistering of circuitry and, in the worst case, igniting.

What to do: Contact your local authorised Holden dealer immediately to have the fuel feed hose replaced. For further information call 1800 632 826.

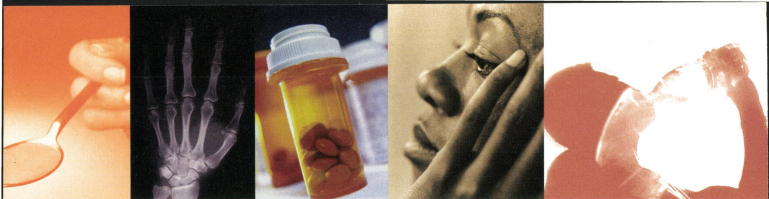
THE PRODUCT: Hyundai Australia has recalled **Hyundai Trajet** model vehicles, sold in Australia since May 2000.

The problem: Metric (8 mm) threaded child-restraint anchors have been fitted instead of specified imperial (5/16" UNC) threaded anchor points in a number of vehicles, resulting in mismatching of bolts and anchor fittings.

What to do: Contact your local authorised Hyundai dealer, who will replace the anchor points.

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You can also email us any recalls or bans not on this list at ausconsumer@choice.com.au.



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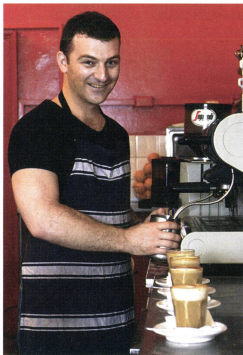
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50 • CHOICE January/February 2001

CHOICE HOME PAGE



VANESSA MARSHALL

Want a coffee machine at home that can do this? A test of espresso machines is coming soon.

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MARCH 2000 — JANUARY/FEBRUARY 2001

How to use this index

Bold type indicates a test, survey or trial report; normal type indicates other articles.
 * indicates an update of a previous report, additions or corrections to reports, small follow-up items or letters.

For space reasons, the index generally doesn't include Choice Cuts, many other small pieces, and Recalls and Bans.

A ged care, nursing homes Air coolers, evaporative Animal testing, for cosmetics Annual buying guide Appliance reliability	Jun Nov Jun Dec Mar	Cordless kettles Cordless phones Cots, portable	Mar, May*, Jun* Jan/Feb Jul	Freedom of information Fridges 2-door, 470–520 L side-by-side, 620–660 L	Jan/Feb May Sep	N ursing homes	Jun
B ack pain Banks accounts, how to change getting a better deal satisfaction with Barbecues, gas Bathroom scales Bike helmets Binoculars Blenders Bookshops online Breakfast cereals Bunk beds Buying guide, annual	Jun, Aug* Jul Mar Dec Apr May Jun, Dec* May Nov, Jan/Feb* Mar Sep Dec	D etergents, laundry Diet pills Digital TV Dispute resolution schemes Drills, impact Drugs, lifestyle Dryers, clothes E ggs Energy labels, new Environment green power long-life light bulbs recycling fabrics Evaporative air coolers	Apr Oct Aug, Dec* Jul Aug Mar May Jan/Feb Aug Aug Apr, Jun* Nov	G arden lawn trimmers, petrol watering kits Gas barbecues Global positioning system for cars handheld units Green household, quiz Green power GST	Nov Sep Dec May Sep Aug Apr, Jun*	O live oil Online bookshops Organ donation Organic food	Nov, Jan/Feb* Nov, Jan/Feb* Aug, Jan/Feb* Sep
C affeine Cameras, compact and APS Cars car of the future child restraints crash tests, ANCAP satellite navigation (GPS) used car safety Cereals, breakfast Child/baby concerns bunk beds car restraints cots, portable layback strollers Chocolate, taste test CHOICE, 40 years on Cleaners, imported Clothes dryers Coconut milk and cream Compact fluorescent light bulbs Computer buying your first offer to subscribers Cooktops ceramic choosing Coolers, evaporative	Jun Jan/Feb Oct Sep Aug May Jan/Feb Mar Sep Sep Jul Aug May Apr Mar May Jun Apr, Jun* Nov Nov Mar Mar Nov	F an heaters Fats ain't fats ... Fibre, in diet Financial — see also Banks interest rates management clubs invested funds mortgages, choosing and changing planning for a lifetime spending patterns 1960–2000 Food 20 questions answered breakfast cereals caffeine chocolate, taste test coconut milk and cream diet pills eggs fats ain't fats ... fibre ice cream olive oil organic salsa salt: how much do you eat? supermarket value brands teabags weight-loss programs	May Oct Apr Dec Jun Jan/Feb Sep, Nov* Jun Apr Aug Mar May Jun Oct Jan/Feb Oct Apr Jan/Feb Nov Sep Sep Jul, Oct* Sep Jul Apr	Health back pain caffeine diet pills fibre herbal supplements private insurance call centre advice salt, with quiz smoking, how to quit weight-loss programs Healthcare, medical records Heaters, fan Herbal supplements I ce cream Ice cream makers Impact drills Index, four-year Insurance health insurance call centre advice travel Internet chat rooms/IRC searching Investment clubs Irons, steam J uicers K ettles, cordless L aundry detergents Lawn trimmers, petrol Lifestyle drugs Light bulbs, long-life Lighting options Los Angeles M anaged funds Medical records, privacy Mobile phones hands-free kits phone plans Moisturisers Money — see Financial Mortgages, choosing and changing	Jun, Aug* Jun Oct Apr May Nov Jul, Oct* Jul Apr May May May Jan/Feb Dec Aug Jun Nov Nov Jun Aug Jun Jun Oct Apr Nov Mar Apr, Jun*, Oct* Oct Oct Jan/Feb May Aug Aug Apr Sep, Nov*	P aint exterior low-odour Parallel imports Phones cordless mobile — see Mobile phones Portable cots Power, standby Printers, choosing Propecia, 'lifestyle' drugs R angehoods Recycling, fabrics Refinancing your mortgage Refrigerators — see Fridges Reliability, appliances S alsa Salt: how much do you eat? Scales, bathroom Scooters Searching the Internet Shiraz Shopping supermarket price survey supermarket value brands Slimming programs Smoking, how to quit Spending patterns Standby power Steam irons Strollers, layback Suitcases, carry-on, trolley Supermarket prices T ax, GST Teabags Telephones — see Phones Television, digital stereo (68 cm) Travel insurance LA, what to see suitcases, carry-on, trolley V acuum cleaners handheld VCRs, hi-fi Viagra, 'lifestyle' drugs Video recorders, low-price mono W ashing machines Watering kits, garden Weight-loss programs Wine, shiraz X enical, 'lifestyle' drugs	Oct Jun Mar Jan/Feb Jul Dec Sep Oct, Dec* Apr Sep Sep Jul, Oct* Apr Dec Aug Dec Dec Jul Apr Jul Apr Dec Jun Aug Oct Dec Apr, Jun* Sep Aug, Dec* Apr, Aug* Nov, Jan/Feb* Oct Oct Jul Jan/Feb Mar Jul Sep Apr Dec Mar

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Got It! SALTED PITA BREAD
WHITE

NO ADDITION
NO ADDED SUGAR
LOW SALT
LOW YEAST
NO ADDED FAT

WHOLESTERN FRIES
450g NET

CONTENTS: 5 PIECES

There are
hothouses and
HOT houses!

DAYS AT ROOM TEMPERATURE (221°C). FOR EXTENDED STORAGE REFRIGERATION IS

PRODUCTS will continue to guarantee the right directly, for a lifetime, against breakage or defects in workmanship. Lifetime guarantee does not cover the lamp or batteries. The "O" rings must be kept greased (and replaced if damaged) per product instructions. (Replace "O" rings annually or when damaged.) Any liability, either expressed or implied is limited to replacement of the light. This guarantee is void only if the PELICAN LIGHT has been abused beyond normal and sensible wear and tear. The above guarantee does not cover sharkbite, bear attack, or children under 5.

Rampaging rug rats

This disclaimer only confirms what we've always suspected: that small children have the same destructive force as wild bears and killer sharks.

FUNNY CAR

RECOMMENDED FOR UNDER 3 YEARS OF AGE

WARNING: CHOKING HAZARD - Small parts Not for Children under 3 years

Well? Is it or isn't it?

How can something be recommended but unsafe for the same person — in this case a child under three?

Trash & Treasure
Australia Pty Ltd ACN 004 724 707

TURN YOUR CASH INTO \$\$\$ EVERY SUNDAY

• Bay of Sea • Bargains Galore
• No Bookings Required • Bezaire-like Atmosphere
• First In Sunday Markets
• Invoiced Family Outlets • Sell It Yourself! Chatter Market

Is this some kind of
money-laundering
scheme?

Although it could be handy if your cash just happens to be yen or pesos or something.

LASER HAIR REMOVAL

BEFORE

AFTER



Great news for the
hair-challenged...

At last — a laser hair growth stimulator.

The remarkable new Daikin Inverter Air Conditioner

Cooking Capacity 0.9-4.8-5.2kW (min-rated-max)
Heating Capacity 0.9-6.7-8.0kW (min-rated-max)

Daikin

•Efficient •Cooling & Heating for large areas up to 7 squares.



\$2763

•Advanced inverter technology.

Devious appliances or just
confused identity?

Last month we had a vacuum cleaner that reckoned it was a TV, now there's an air conditioner that cooks! What will they think of next?

DOORS

DOORS - Repaired, replaced, renewed. Same day burglary service.

You've been warned!

How very convenient: get your house burgled and a new door all on the same day.

How about a little help?

The hard word would like to thank all the readers who've responded with examples of outrageous ads, promotions and products. Thanks to S Anderson, B Colville, the Fehily family, A Gillett, P Jones and J Schafferius for their contributions to this month's *Hard Word*. Please keep sending them in.

If you have any examples you think deserve to be on this page, send them to *The hard word*, CHOICE, 57 Carrington Road, Marrickville 2204, or email your suggestions to thehardword@choice.com.au.